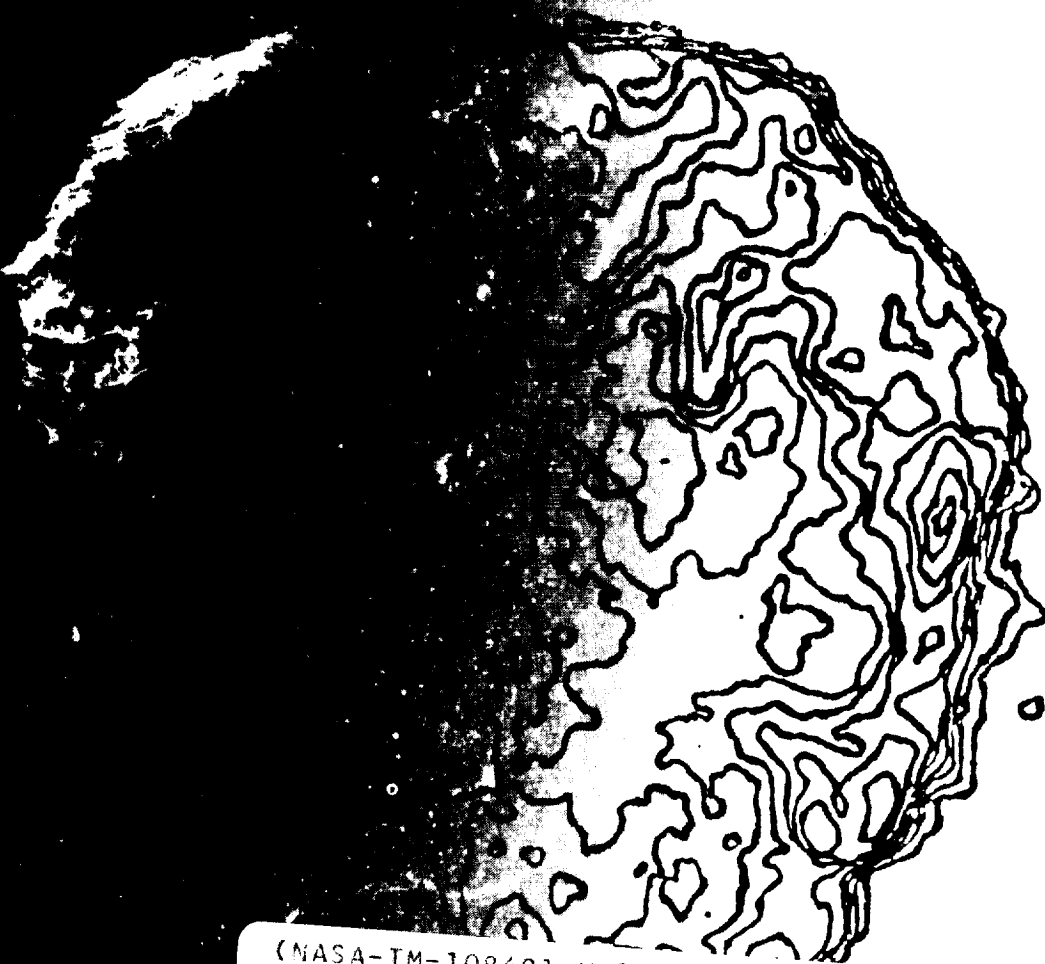


# THE EINSTEIN OBSERVATORY CATALOG

OF IPC X-RAY  
SOURCES



(NASA-TM-108401-Vol-5E) THE  
EINSTEIN OBSERVATORY CATALOG OF IPC  
X RAY SOURCES. VOLUME 5E: RIGHT  
ASCENSION RANGE 12h 00m TO 15h 59m  
(NASA) 778 p

N94-18613

Unclas

G3/90 0195932

SMITHSONIAN ASTROPHYSICAL OBSERVATORY





[Relevant section numbers of Volume 1 are given in square brackets.]

- A) Sequence number of the observation. [5.0]
- B) Right ascension (1950) of the field center.
- C) First contour level (counts arcmin<sup>-2</sup>) and peak value. Successive contours increase by factors of 2. Negative contours are dotted. [4.5]
- D) Numbers of deep survey (DS) and bright Earth (BE) counts contained in the background map which has been subtracted from the data. [4.5]
- E) "Road-map" grid defining detector coordinates. These are required for estimating intensity upper limits. They are not present for observations which include data with "unstable" pointings. [4.6]
- F) Gray scale showing the relative exposure map (dominated by vignetting and the rib support shadows). [4.3]
- G) Intensity map, with detected sources indicated by field number and a cross (also listed in the table below the map). The map has had the background subtracted and has been corrected for vignetting. [4.1, 4.2] The coordinates of the map are R.A. and decl. (1950).
- H) Observation title from "Yellow Book" (Seward and Martenis 1986).
- I) Position of the field center in celestial (B1950 and J2000) and Galactic coordinates. [3.1]
- J) Other field data: start and stop dates [3.2]; live time [3.3]; roll angle of detector (clockwise from north; for zero degrees roll, detector letters are along the bottom of the road map) [3.4]; and the column density of neutral hydrogen in our Galaxy [3.5].
- K) Ref/ID flag: a nonblank entry indicates that a paper has been published on this field or on a source in the field. [3.6; Appendix I]
- L) Field flag [3.7]:
  - B: Background map suspect; may affect MDETECT
  - C: Combined fields: a merged map exists [Appendix J]
  - D: Deletion of one or more detections judged to be spurious [Appendix F]
  - G: Ghost image probably present
  - L: LDETECT only (MDETECT not run)
  - P: Particle-event contamination possible in background
  - S: Source has been missed by the detect algorithms [Appendix G]
  - T: Time correction redone to rectify erroneous dead-time calculation
- M) Catalog number and field number for the sources. An "L" following the field number indicates that the source was found by LDETECT only. [5.1, 5.2]
- N) Corrected count rate, as measured in a 2'4 box [5.4]. A preceding "\*" warns that the intensity may be underestimated [5.8].
- O) Cell counts and the signal to noise ratio of the detection. [5.5, 5.6]
- P) SIZCOR, an intensity correction factor useful in estimating the intensity of extended sources, is the ratio of counts within the 3  $\sigma$  (lowest) contour to the net cell counts (corrected for the point response function) [5.7]. RECO, the "rib and edge code," when nonzero, indicates that intensity measurements may be underestimated [5.8].  $R'$  is the distance from the source to the field center in arcminutes.
- Q) Source flag [5.10]:
  - A: Additional detection(s) occurred in other field(s). [Appendix H]
  - a: Probably should be paired with another detection, but separation exceeded cutoff and thus not assigned an "A" flag.
  - E: Intensity corrected for source near the exposure cutoff at the field edge.
  - H: A hardness ratio is available [Appendix D]
  - I: Source detected by LDETECT near field edge. Intensity adjusted to remove redundant exposure correction.
- R) Ref/ID flag; see (K) above. [5.11]
- S) Volume number and page number



# THE EINSTEIN OBSERVATORY CATALOG OF IPC X-RAY SOURCES

The *Einstein* Catalog Committee

D. E. Harris ( <i>chair</i> )	T. Maccacaro
W. Forman	J. D. McSweeney
I.M. Gioia	F. A. Primini
J.A. Hale	J. Schwarz
F.R. Harnden, Jr.	H. D. Tananbaum
C. Jones	J. Thurman
T. Karakashian	

Smithsonian Astrophysical Observatory  
Cambridge, MA, USA

## Volume 5

**$12^h\ 00^m$**

**to**

**$15^h\ 59^m$**

1990

The graphic inset on the cover was designed by Elizabeth Bohlen. The X-ray contours of the Cygnus Loop were generated by F. Seward from a montage of several IPC observations. The optical photograph is from the Palomar Sky Atlas; ©1960 The National Geographic Society - Palomar Sky Survey. Reproduced by permission of the California Institute of Technology.

*The first volume of this seven-volume catalog contains complete documentation for the material that follows. Volumes 2–7 contain the Einstein imaging proportional counter (IPC) observations, ordered by right ascension with 4 hours per volume. Here we provide a short guide to the catalog pages, but the user is referred to Volume 1 for the details of this catalog.*

## 1 The Contour Map

The map is constructed from the BROAD energy band (0.16–3.5 keV), smoothed with a Gaussian of FWHM=75". The data have had background subtracted and vignetting corrections applied. X-ray brightness units are counts arcmin<sup>-2</sup>, with contour levels increasing by factors of 2. Dashed contours indicate negative levels (with the same values as the positive contours). The lowest positive contour level is 3  $\sigma$  above the background at the field center; this level and the peak brightness level in the map are given in the lower left-hand corner.

Sources satisfying the catalog selection criteria (cf. § 2 of Vol. 1) are indicated by crosses, with their field numbers adjoining the cross. The gray scale shows the relative exposure, ranging from 1.0 at the field center (white) to zero under the rib shadows. Although it is difficult for the eye to differentiate between zero and the normal values in the field corners (about 0.25), we have chosen this low-contrast gray scale so that the contours will still dominate the visual impression. The exposure map is zeroed at any location where the effective exposure is < 300 s or < 25% of the value at the field center.

For observations with "stable" pointings, a "road-map" index surrounds the map. This grid of characters defines detector coordinates, and may be used with the tables in Appendix B (Vol. 1) to estimate upper limits for X-ray intensities at arbitrary locations within the field.

In the lower right-hand corner we give the counts in the background maps which were subtracted from the image prior to smoothing the data. "DS BKG CNTS" gives the total counts in the scaled version of the standard background map made from a superposition of deep survey fields. "BE BKG CNTS" specifies the contribution (positive or negative) to the background map from the standard "bright Earth" background.

## 2 Field Description

Beneath the contour diagram are parameters pertaining to the observation. The observation title was taken from the "Yellow Book" (Seward and Martenis, 1986), which is known to contain a few misnamed sequences. Titles preceded by "(?)" appear in Table 3.0 (cf. § 3.0 of Vol. 1), which lists possibly misleading titles. The coordinates of the field center are given for two epochs, B1950 and J2000, as well as in Galactic coordinates. The date entry gives the start day and stop day of the observation in yyyy/ddd format. The "live time" is the data-acquisition time corrected for telemetry dead-time effects. The roll angle is given for observations with stable pointings, and is the angle which specifies the orientation of the detector on the sky, with positive values indicating clockwise rotation when looking at the sky, starting from north as zero degrees. For a roll angle of zero, the "narrowest edge area" (i.e., outside the shadow of the entrance window support "ribs"; cf. Vol. 1) lies horizontally along the top of the map; the numbered detector coordinate scale runs down the left side; and the lettered scale is on the bottom, running from left to right.

The column density of neutral hydrogen in our Galaxy for the pointing direction, given as the " $N_H$ " parameter, has been integrated from radio observations of the HI line. The "Ref/ID" flag, if present, alerts the reader that Appendix I of Volume 1 contains an entry referring to a publication dealing with this observation. The field flag is used to describe certain conditions which are listed at the end of this introduction.

## 3 The Source Table

Whenever sources have been detected (at signal-to-noise ratios  $\geq 3.5$ , in the BROAD energy band), a source table is present below the field description. The catalog number identifies unique sources in this catalog. The field number should be considered an "internal" catalog parameter to be used to facilitate the correlation of contour map features with their entries in the source table and to locate source information in the appendices. "External" references to sources should use the IAU conventions or the catalog number, both preceded by "2E," which is the adopted prefix for this catalog (see Vol. 1, §1.5).

The count rate (with its  $1\sigma$  uncertainty) refers to that measured in the standard detect cell ( $2'.4$  on a side) and has been corrected for telescope vignetting as well as for the standard scattering correction. The net and background counts also refer to the standard detect cell and are provided to assist users in evaluating source reliability. The signal-to-noise ratio of the detection is also given.

The size correction ("SIZCOR") is a multiplicative factor useful in estimating the intensity of sources which are much more extended than the resolution of the maps (approximately  $2'$  FWHM). RECO is the "rib and edge code" and, when nonzero, alerts the user to the condition that the source intensity measurement may be affected by shadowing of the window support structure (ribs) or proximity to a detector edge. The distance of the source from the field center is given in arcminutes by  $R'$ .

The source flag is a one letter indicator denoting certain conditions described below, and the "ID" flag, when present, indicates that references to published papers concerning the source can be found by consulting Appendix I (Vol. 1).

## 4 Meaning of the Flags

Complete descriptions of the purpose and meaning of the various flags is given in Volume 1; here we give only a brief summary.

### Ref/ID FLAGS

AGN	Active galactic nucleus
BL	BL Lac object
CLG	Cluster of galaxies or group of galaxies
CV	Cataclysmic variable
G	Galaxy
GLB	Globular cluster
P	Pulsar
Q	Quasar
RS	Radio source (optical type not specified)
S	Star
SNR	Supernova remnant
SY	Seyfert galaxy
*	Unspecified type: indicates separation $< 100''$
†	Unspecified type: indicates separations between $100''$ and $150''$
!	Unspecified type of (undetected) source(s) in the field

### FIELD FLAGS

- B — Background is suspect; not a reference to further information. For a very few sequences, the MDETECT background map seemed unsuccessful in representing the true background. In these rare cases, the reliability of MDETECT sources (and the values of SIZCOR) may have been affected.
- C — Combined to form merged field. The current observation has been merged with one or more additional pointings to produce a combined map with a "new" sequence number. Results of the merged analyses appear in Appendix J, but in order to preserve statistical independence they were not included in the IPC source list (Vol. 1).
- D — Deleted detections. One or more detections have been deleted from this field and are listed in Appendix F of Volume 1. Such detections (primarily within extended emission regions such as supernova remnants and clusters) were deleted from the catalog because they were judged to be spurious.

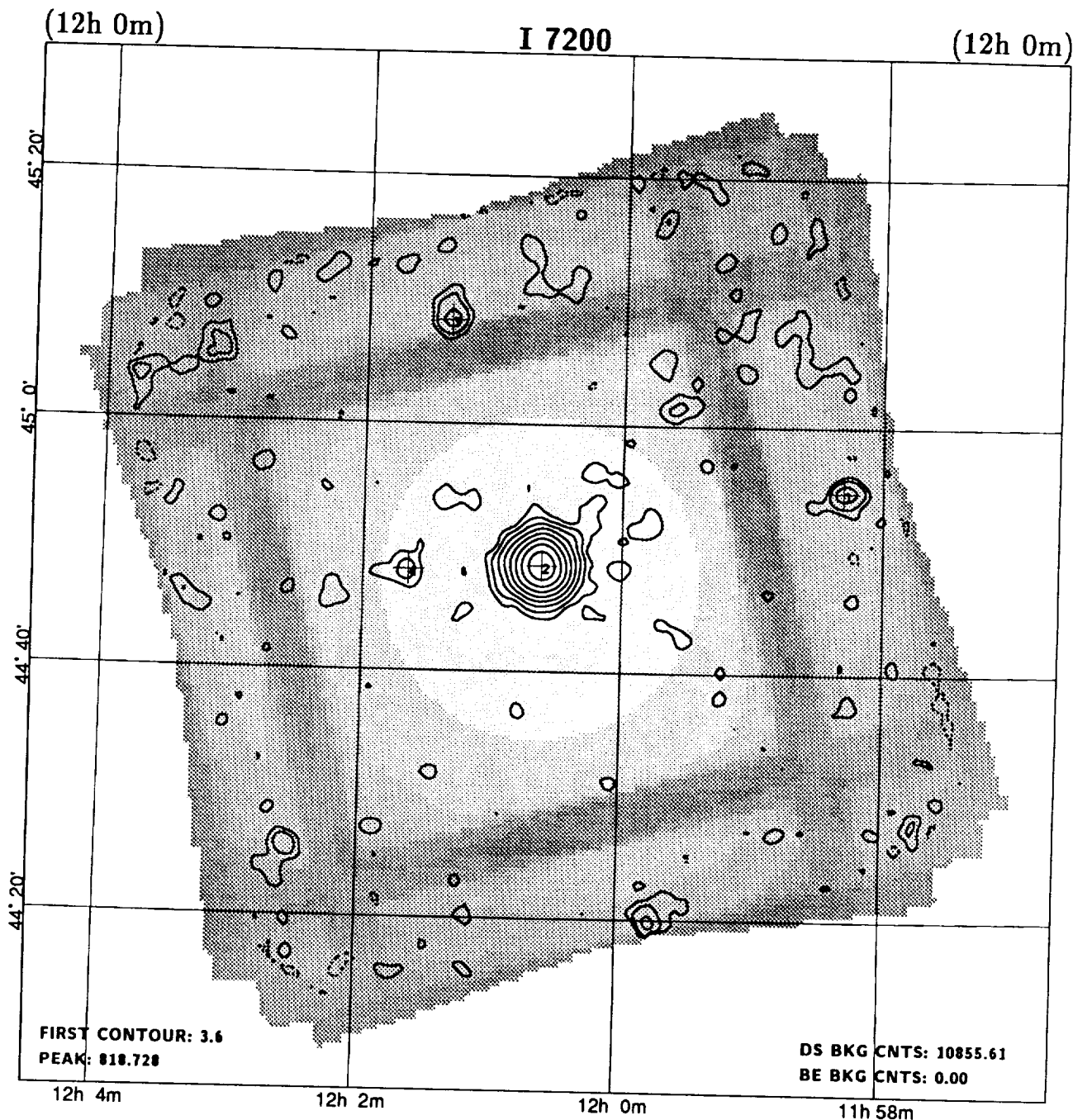
- G — Ghost image (probably) present. See Appendix A of Volume 1 for a description of this effect due to bright sources just outside the IPC field of view.
- L — LDETECT only; not a reference to further information. Reasons for not running the MDETECT detection algorithm are discussed in Appendix A of Volume 1.
- P — Particle-event contamination of the background.
- S — Sources missed. One or more known sources in this field were missed by the detection algorithms. A list of such sources appears in Appendix G of Volume 1.
- T — Time correction made. The dead-time correction used in Rev1B was in error by 3% or more (occurred for 84 IPC sequences); this sequence has been reprocessed to obtain the proper live time.

## SOURCE FLAGS

- A: Additional detection(s) occurred in other field(s).
- a: Probably should be paired with another detection, but separation exceeded cutoff; thus not assigned an “A” flag.
- E: Intensity corrected for source near the exposure cutoff at the field edge.
- H: A hardness ratio is available (cf. Appendix D of Vol. 1).
- I: Source detected by LDETECT near field edge. Intensity adjusted to remove redundant exposure correction.







N4051, VARIABILITY OF TYPE 2 SEYFERTS

FIELD CENTER: 12<sup>h</sup>00<sup>m</sup>36.0<sup>s</sup> 44°47'59" (B1950)  
12<sup>h</sup>03<sup>m</sup>09.2<sup>s</sup> 44°31'17" (J2000)  
 $l$ : 148.90  $b$ : 70.09

DATE: 1979/346 - 1981/ 4  
LIVETIME: 8796.6s

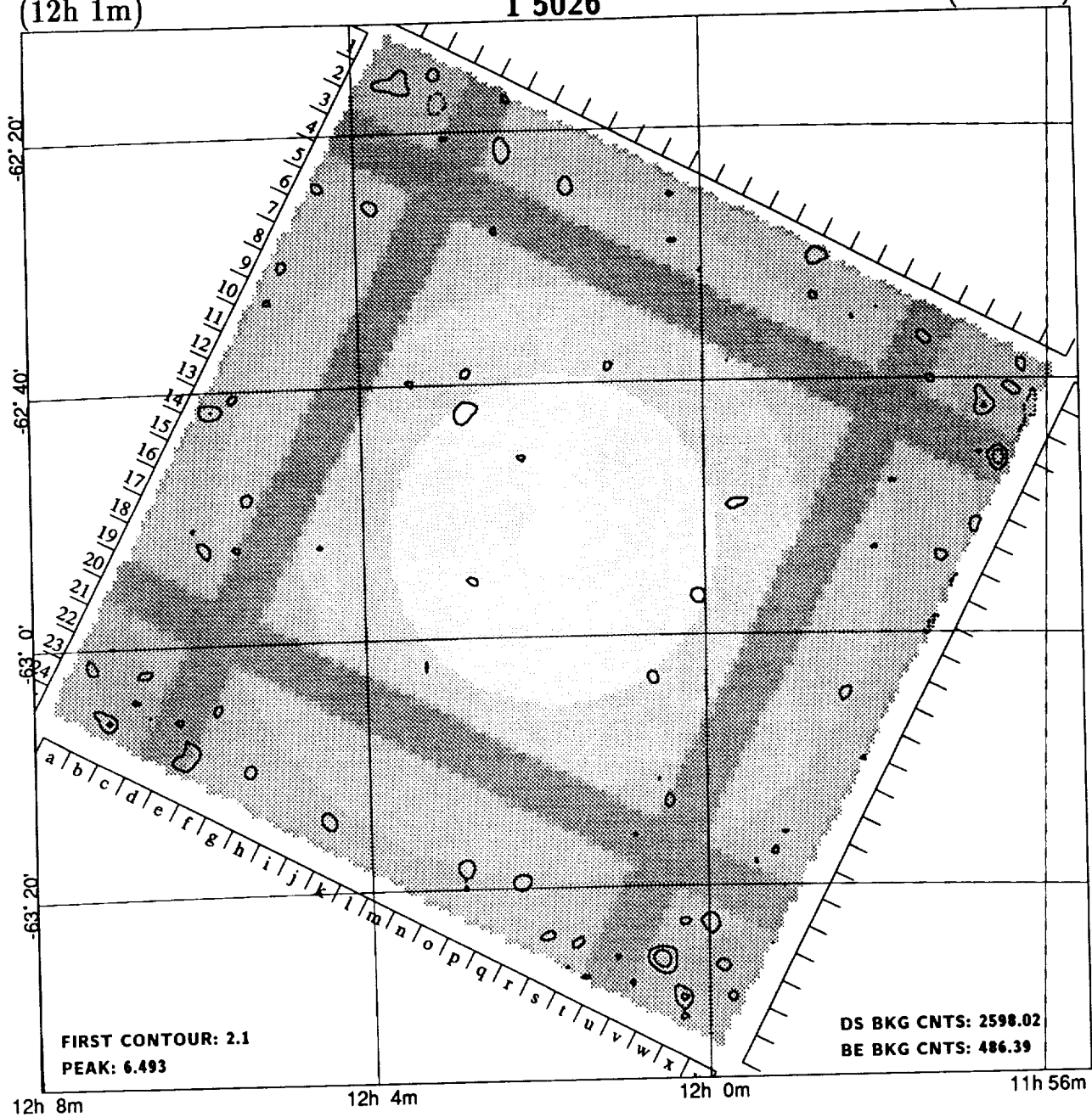
NH: 1.3E+20  
REF/ID:  
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2566	1L	11 58 18.0	44 54 43	51	0.0130	0.0026	47.7	17.3	4.9	1.0	0	25.2	SY	
2578	2L	12 00 37.2	44 48 33	31	0.471	0.011	3082.0	645.0	43.8	1.5	0	0.7		
2580	3L	12 01 21.3	45 08 20	51	*0.0119	0.0028	49.6	22.4	4.1	1.1	603	21.8		
2582	4L	12 01 39.0	44 48 10	42	0.0064	0.0017	36.6	25.4	3.7	1.0	0	11.4		

(12h 1m)

I 5026

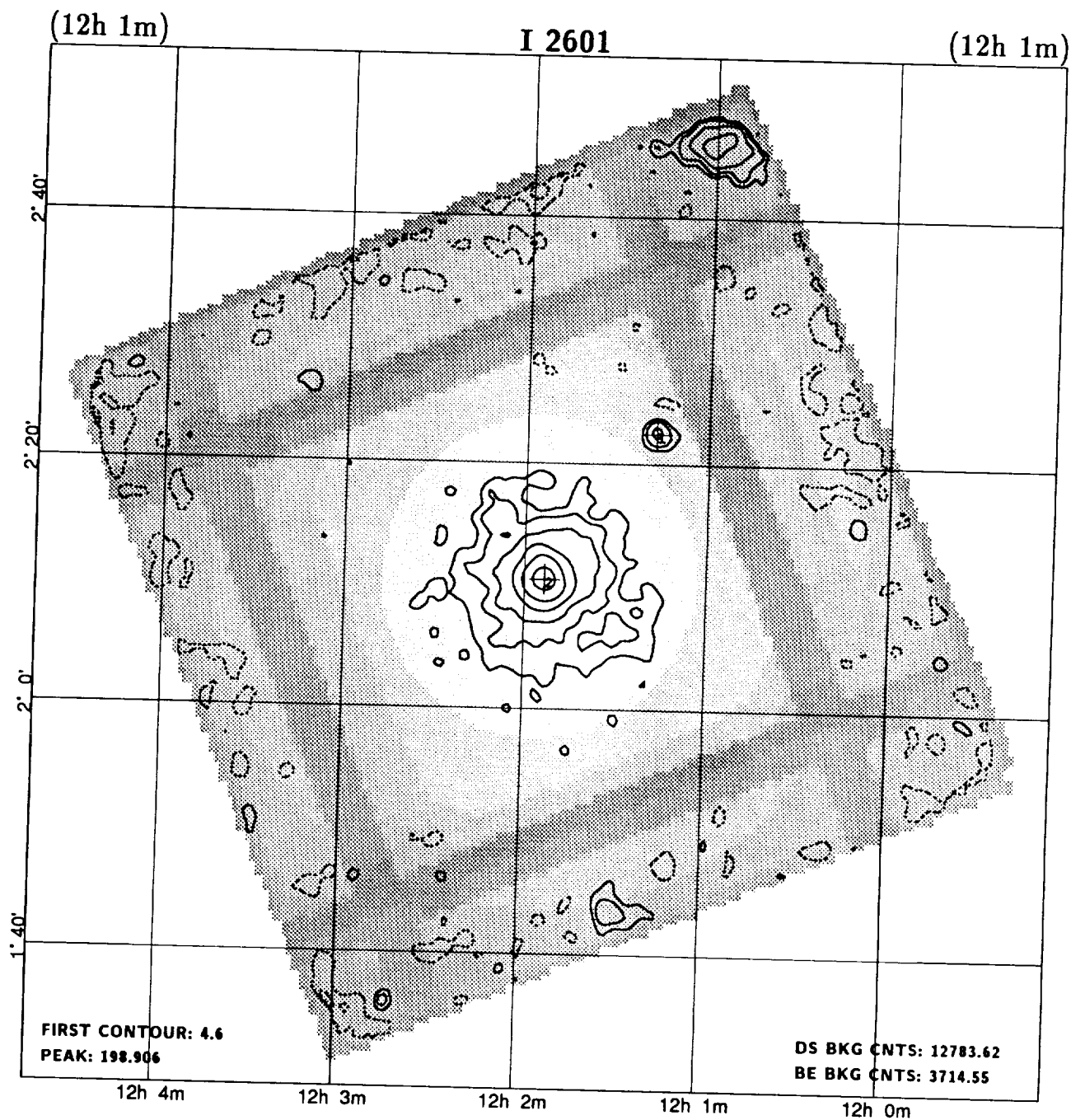
(12h 1m)



FIELD CENTER:  $12^{\text{h}}01^{\text{m}}43.9^{\text{s}}$   $-62^{\circ}53'14''$  (B1950)  
 $12^{\text{h}}04^{\text{m}}19.4^{\text{s}}$   $-63^{\circ}09'56''$  (J2000)  
 $l: 297.64$   $b: -0.78$

DATE: 1980/237 - 1980/237  
 LIVETIME: 2105.3s  
 ROLL ANGLE:  $27.4^{\circ}$

NH:  $1.4\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:



**MKW 4: CD GALAXIES IN POOR CLUSTERS**

FIELD CENTER:  $12^h 01^m 54.0^s$   $02^\circ 10' 59''$  (B1950)  
 $12^h 04^m 27.7^s$   $01^\circ 54' 17''$  (J2000)  
 $l: 276.91$   $b: 62.38$

DATE: 1979/171 - 1981/ 8  
 LIVETIME: 10359.0s

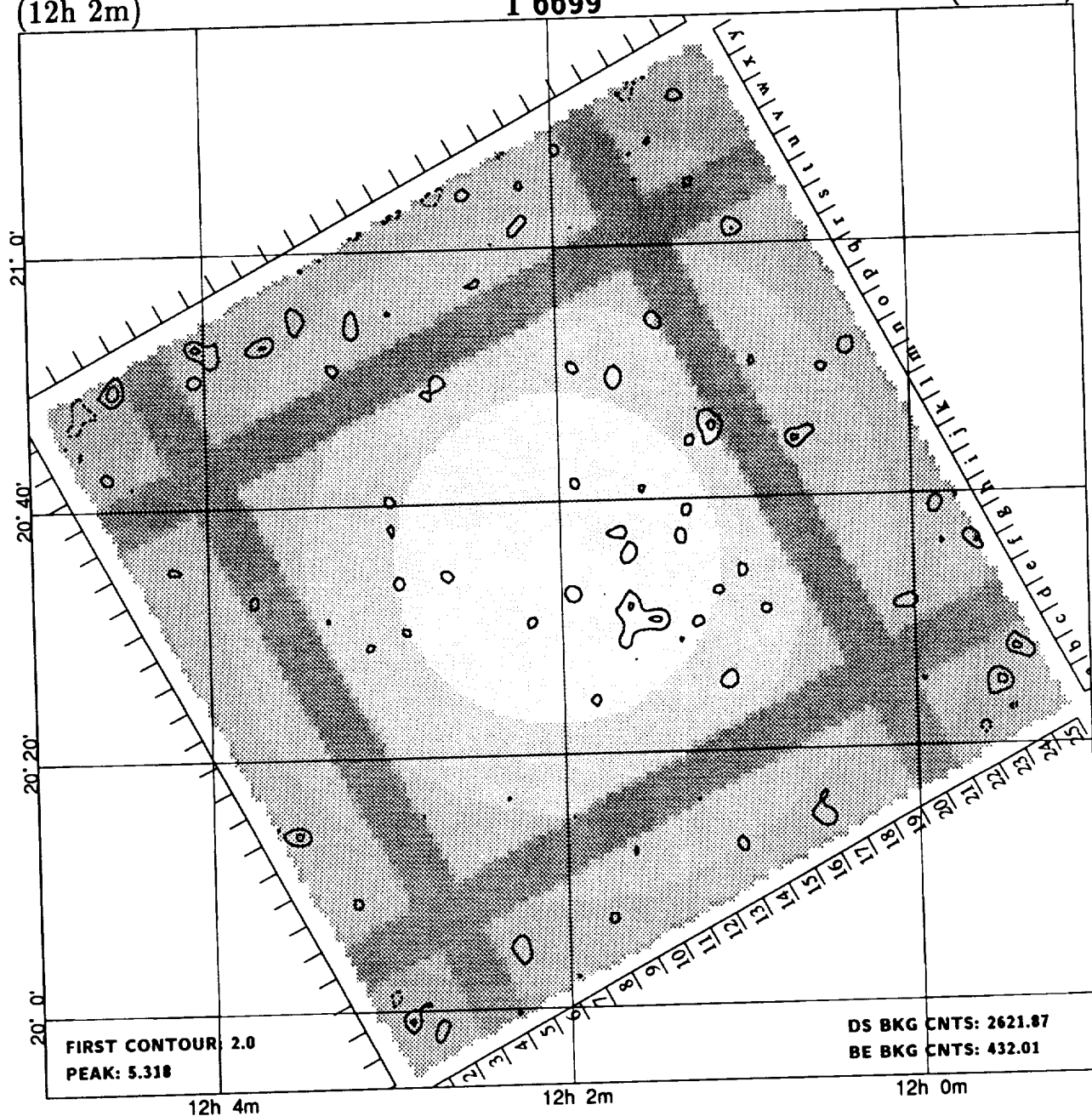
NH:  $1.8E+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2579	1L	12 01 17.3	02 22 24	41	0.0103	0.0019	62.9	29.1	5.4	0.8	0	14.7		
2583	2L	12 01 53.5	02 10 28	31	0.0842	0.0049	650.4	361.6	17.0	3.3	0	0.5		CLG

(12h 2m)

I 6699

(12h 2m)

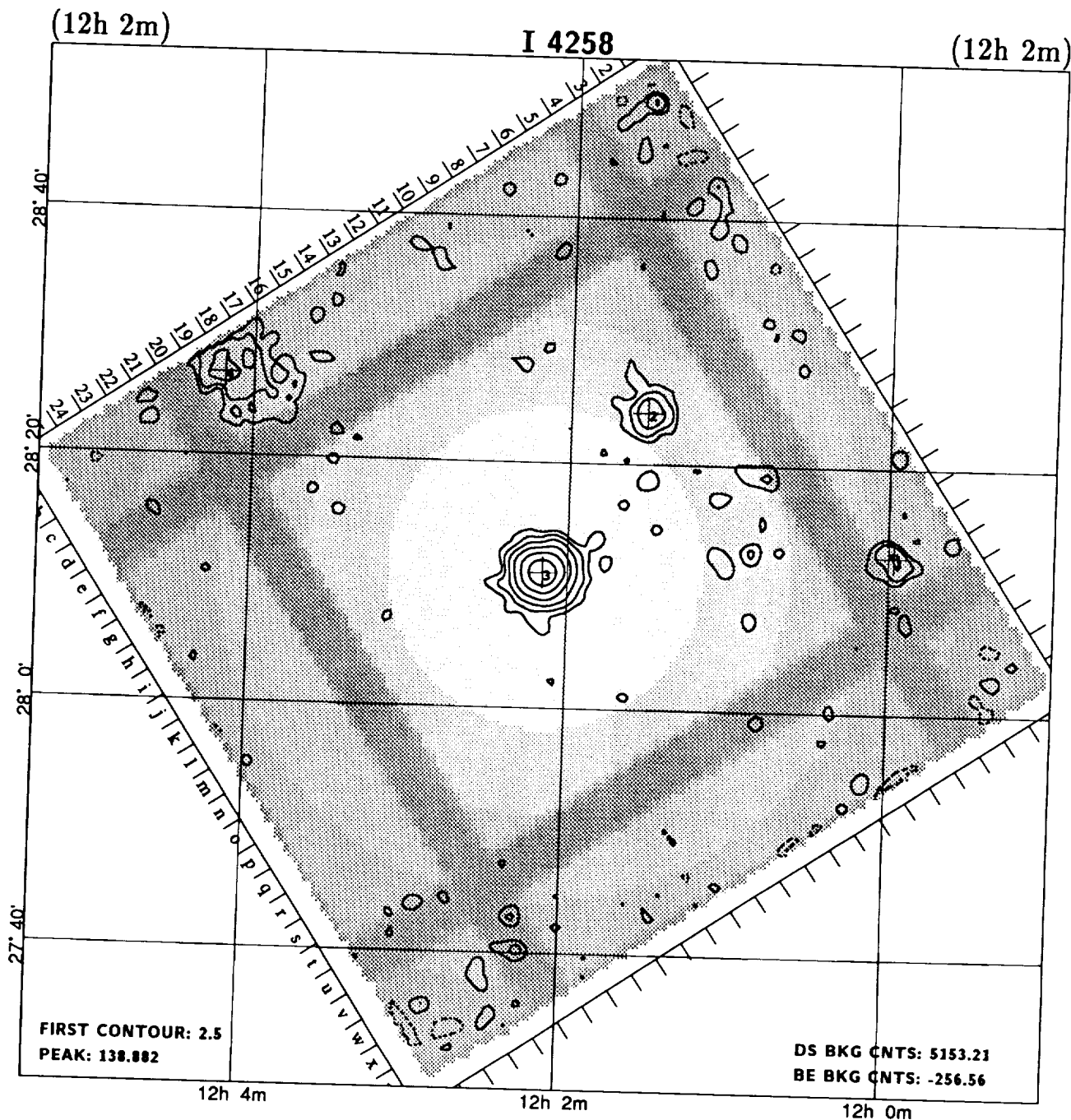


SEYFERT SURVEY: AKN 347

FIELD CENTER:  $12^{\text{h}}02^{\text{m}}00.0^{\text{s}}$   $20^{\circ}35'59''$  (B1950)  
 $12^{\text{h}}04^{\text{m}}33.4^{\text{s}}$   $20^{\circ}19'17''$  (J2000)  
 $l$ : 242.85  $b$ : 77.30

DATE: 1979/339 - 1979/339  
 LIVETIME: 2124.6s  
 ROLL ANGLE: -118.0°

NH: 2.5E+20  
 REF/ID:  
 FIELD FLAGS:



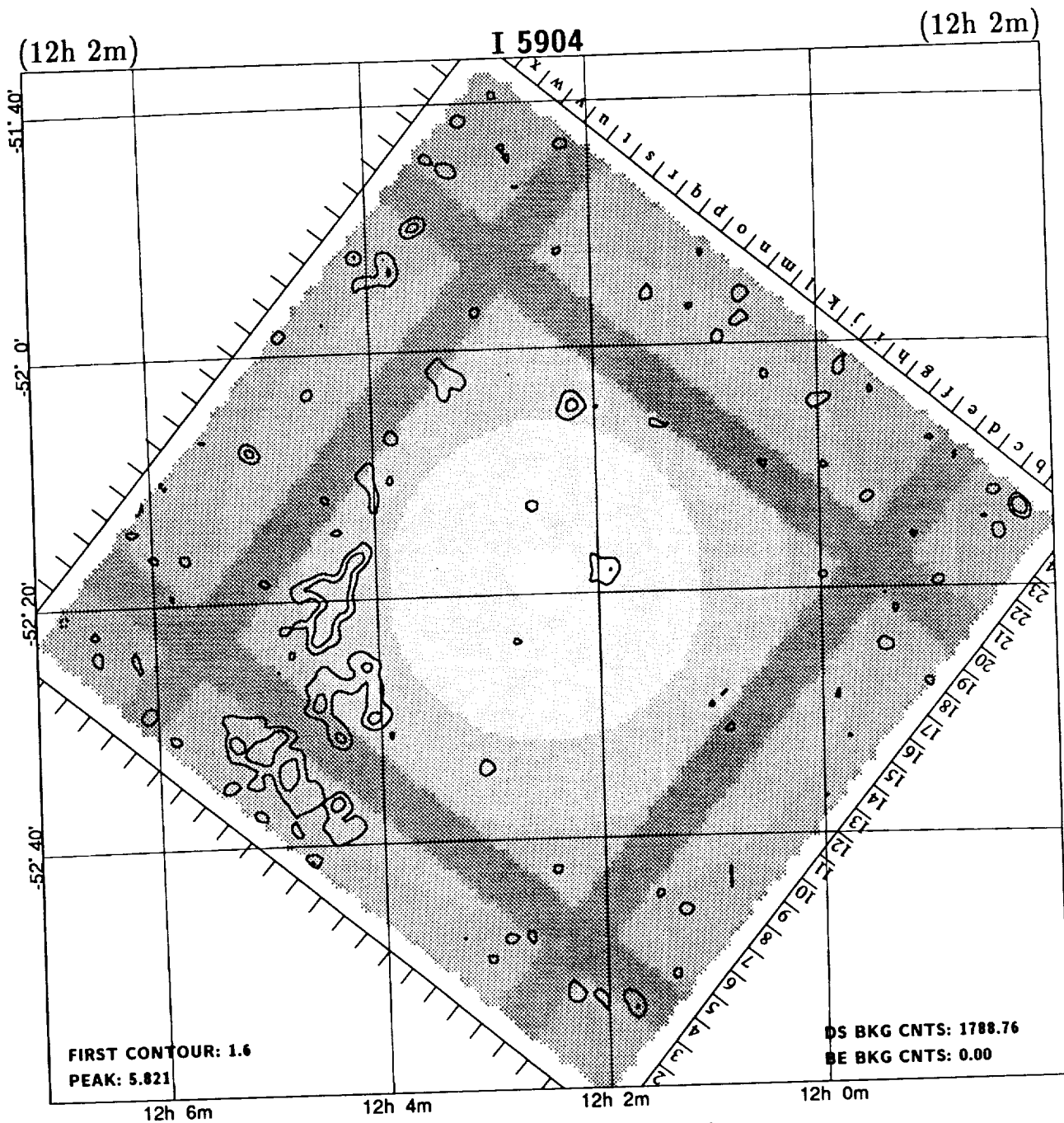
OPTICALLY BRIGHT, RADIO-QUIET QSO

FIELD CENTER:  $12^h 02^m 09.0^s$   $28^\circ 10' 53''$  (B1950)  
 $12^h 04^m 42.2^s$   $27^\circ 54' 11''$  (J2000)  
 $l: 205.96$   $b: 79.61$

DATE: 1979/143 - 1979/144  
 LIVETIME: 4175.8s  
 ROLL ANGLE:  $56.5^\circ$

NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2575	1	11 59 58.0	28 12 43	53	*0.0141	0.0035	22.0	8.0	4.0	1.3	401	28.8		
2581	2	12 01 31.1	28 24 08	50	0.0260	0.0035	64.0	10.0	7.4	1.4	0	15.6	H	CLG
2584	3	12 02 09.4	28 11 01	31	0.2021	0.0081	629.1	11.9	24.8	1.6	0	0.2	AH	Q
2589	4	12 04 10.9	28 26 42	51	0.0218	0.0044	30.3	7.7	4.9	3.2	200	31.1	AH	CLG



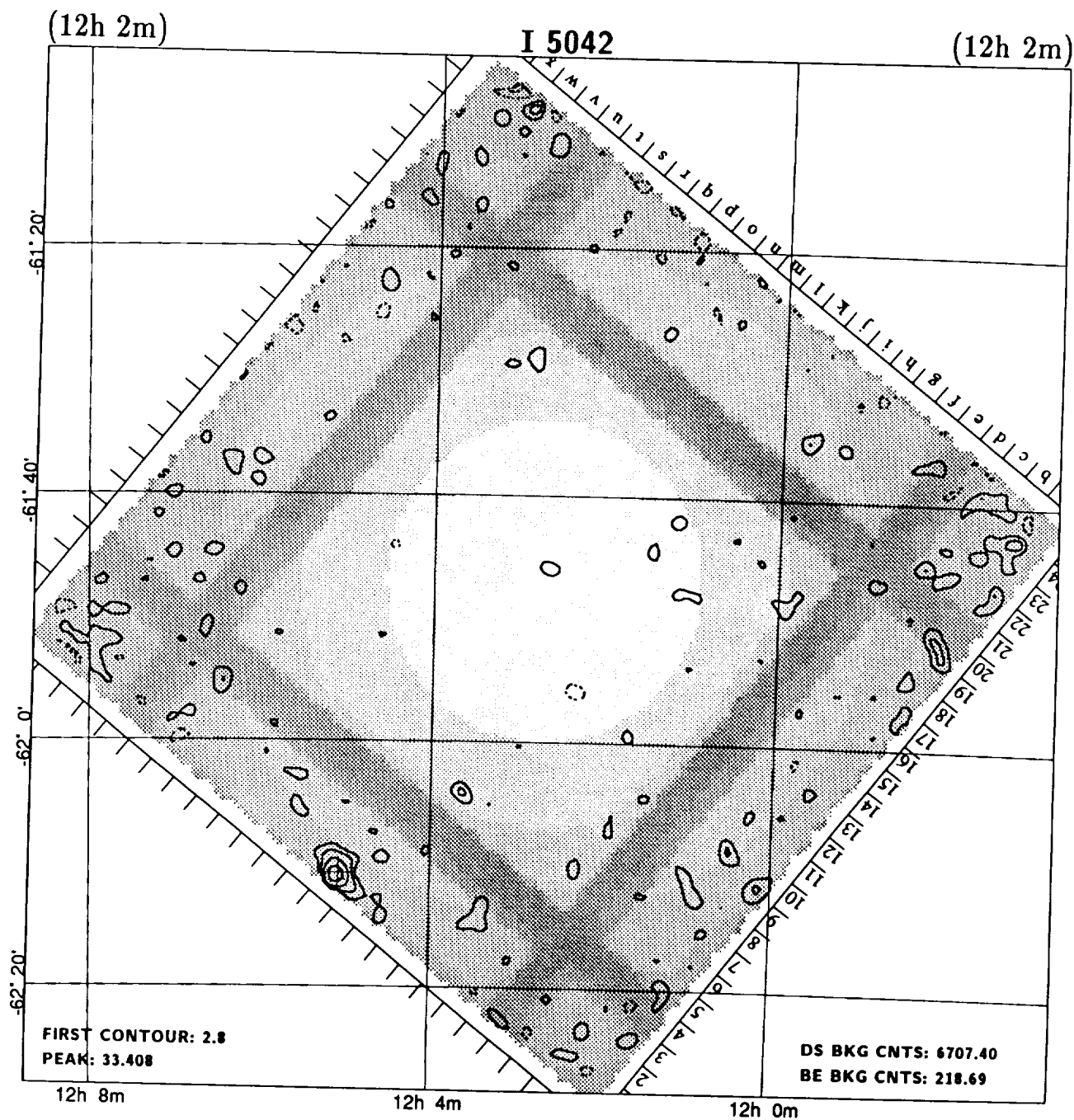
SUPERNOVA REMNANT SURVEY:

FIELD CENTER:  $12^h 02^m 28.7^s$   $-52^\circ 18' 22''$  (B1950)  
 $12^h 05^m 03.8^s$   $-52^\circ 35' 05''$  (J2000)  
 $l$ : 295.82  $b$ : 9.65

DATE: 1980/ 38 - 1980/ 39  
 LIVETIME: 1449.5s  
 ROLL ANGLE:  $-140.5^\circ$

NH:  $1.1E+21$   
 REF/ID:  
 FIELD FLAGS: L





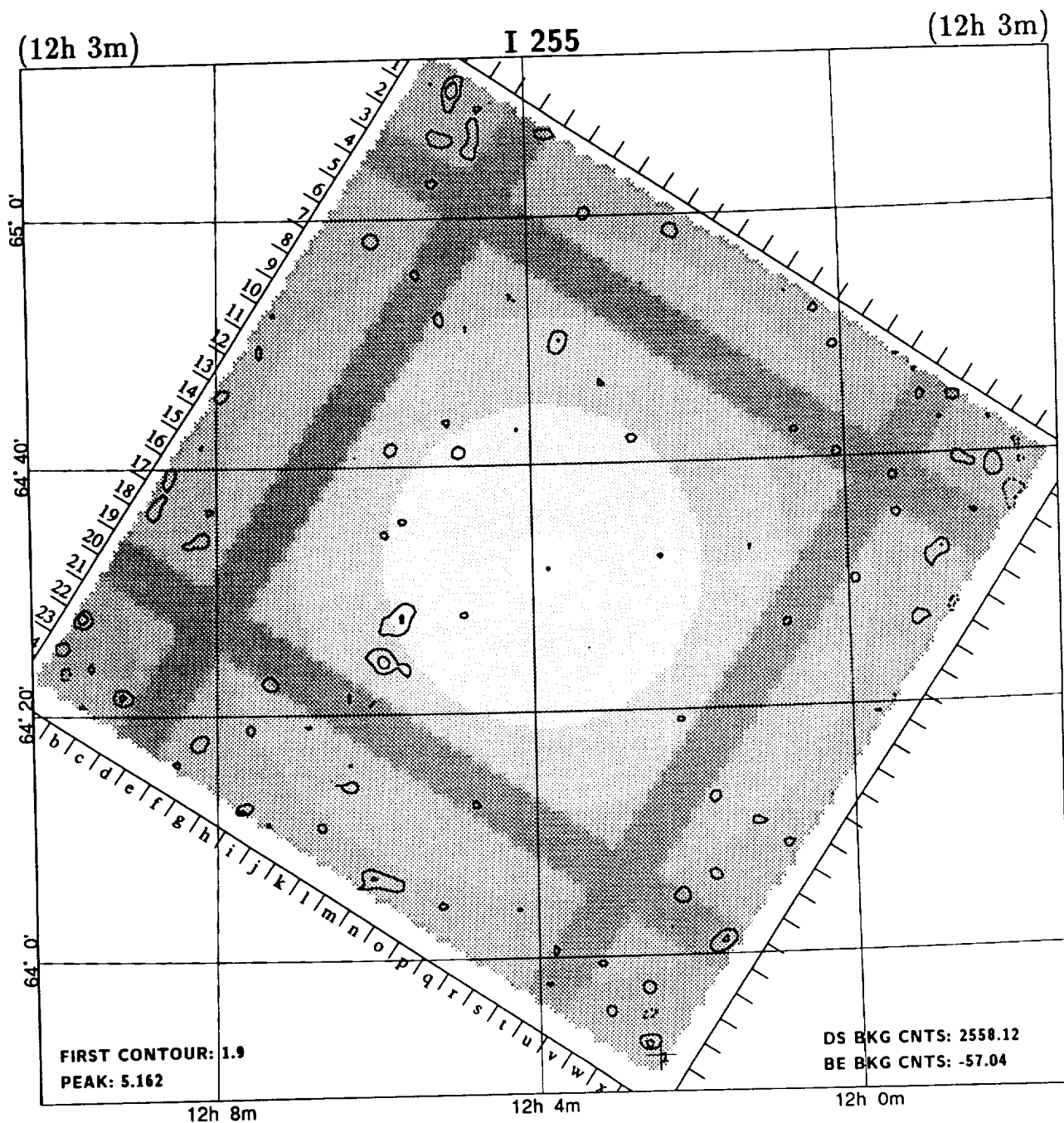
HD 104994, WR STARS W/ OVI EMISSION

FIELD CENTER:  $12^h 02^m 42.8^s$   $-61^\circ 46' 25''$  (B1950)  
 $12^h 05^m 18.7^s$   $-62^\circ 03' 07''$  (J2000)  
 $l: 297.56$   $b: 0.34$

DATE: 1980/ 39 - 1980/ 39  
 LIVETIME: 5435.3s  
 ROLL ANGLE:  $-141.8^\circ$

NH:  $1.4E+21$   
 REF/ID: S  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2590	1	12 05 04.9	-62 10 48	50	*0.0226	0.0038	42.6	9.4	5.9	1.0	401	29.3	H	



**3C 268.3 CLUSTER EVOLUTION**

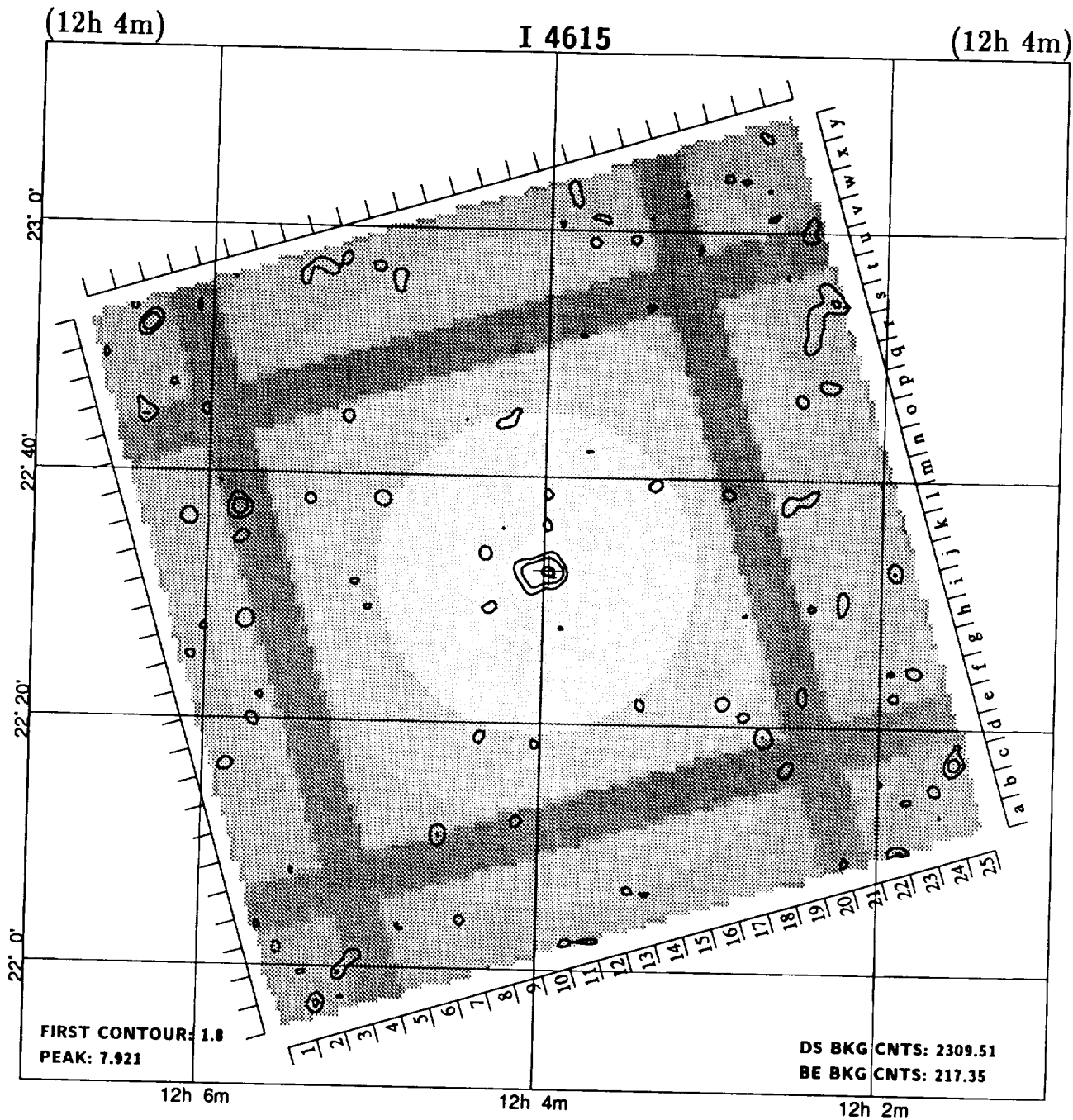
FIELD CENTER:  $12^h 03^m 50.0^s$   $64^\circ 30' 59''$  (B1950)  
 $12^h 06^m 20.6^s$   $64^\circ 14' 18''$  (J2000)  
 $l: 130.90$   $b: 52.19$

DATE: 1979/118 - 1979/118  
 LIVETIME: 2072.9s  
 ROLL ANGLE:  $33.5^\circ$

NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2585	1	12 02 31.3	63 51 53	60	*0.056	0.015	16.0	3.0	3.7	0.0	1002	40.0	EH	





**POOR ZWICKY CLUSTER: 1204+225**

FIELD CENTER:  $12^h 04^m 00.0^s$   $22^\circ 32' 17''$  (B1950)  
 $12^h 06^m 33.1^s$   $22^\circ 15' 35''$  (J2000)  
 $l: 236.03$   $b: 78.71$

DATE: 1979/349 - 1979/349  
 LIVETIME: 1871.5s  
 ROLL ANGLE:  $-106.6^\circ$

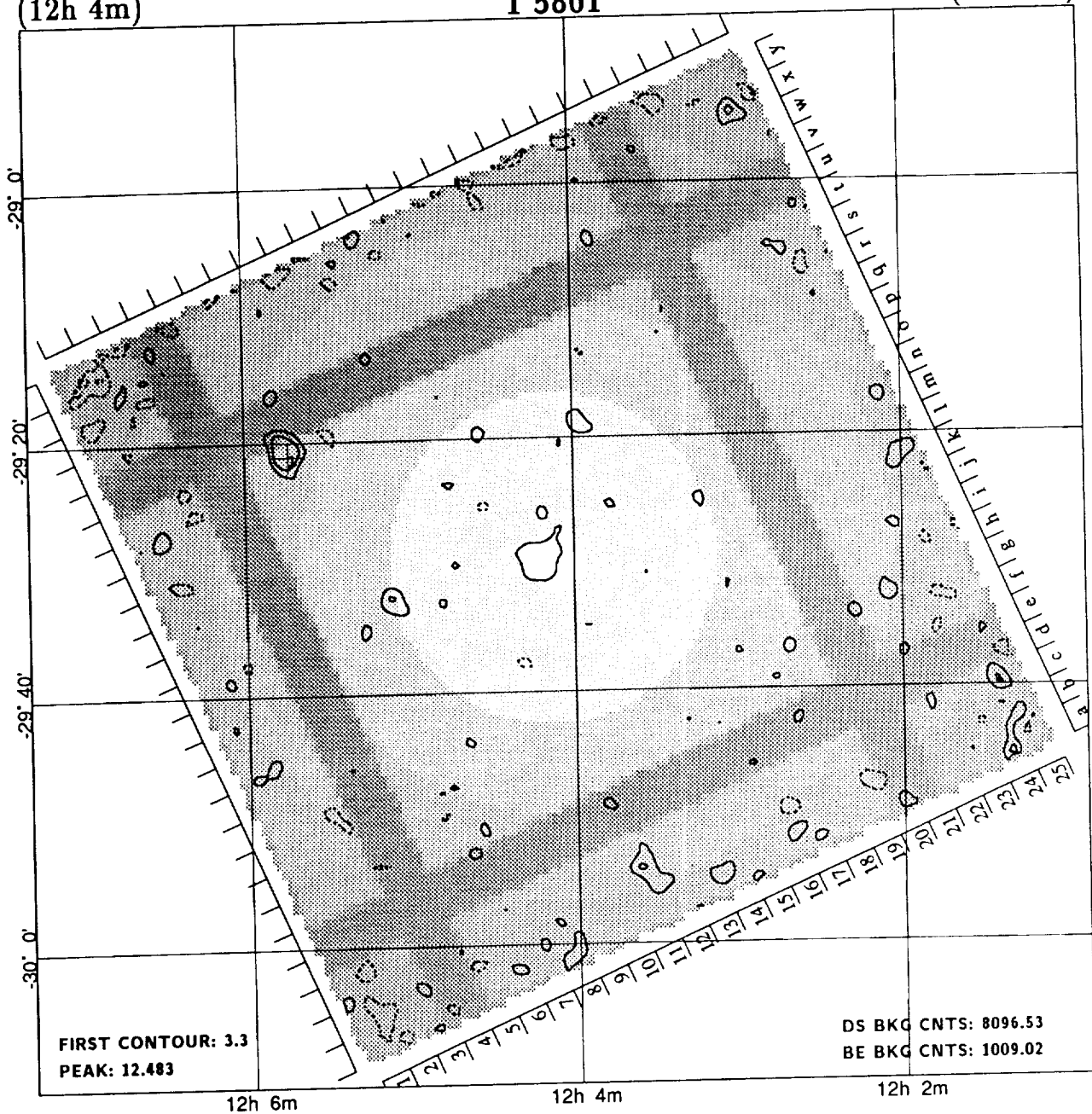
NH:  $2.4E+20$   
 REF/ID: G  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2588	1	12 03 58.2	22 32 22	35	0.0225	0.0044	31.4	6.6	5.1	1.1	0	0.4	H	

(12h 4m)

I 5801

(12h 4m)



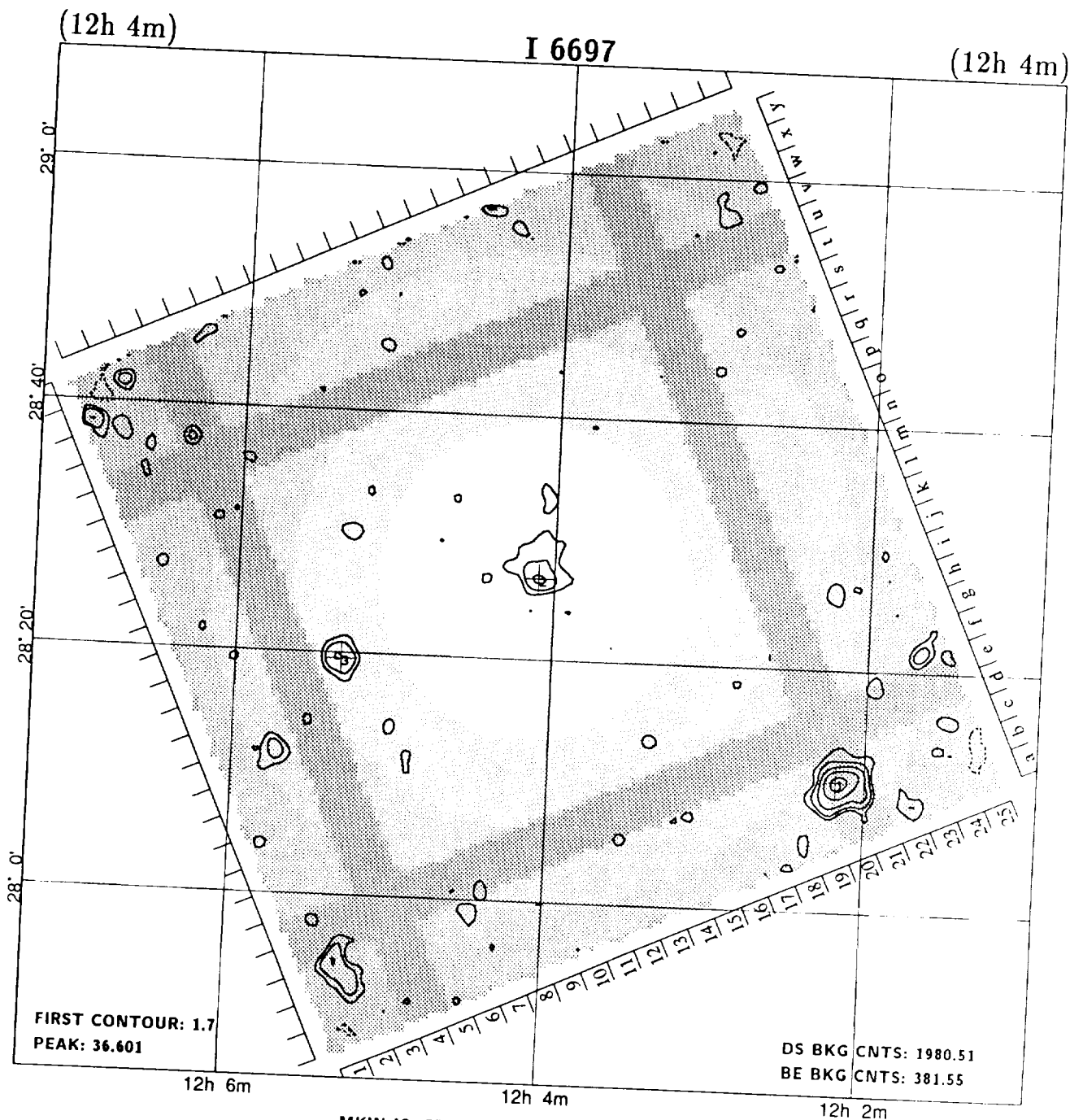
NORMAL GALAXIES: N4105

FIELD CENTER:  $12^h 04^m 06.0^s$   $-29^\circ 28' 53''$  (B1950)  
 $12^h 06^m 40.6^s$   $-29^\circ 45' 35''$  (J2000)  
 $l: 291.46$   $b: 32.11$

DATE: 1980/364 - 1980/364  
 LIVETIME: 6560.9s  
 ROLL ANGLE:  $-113.9^\circ$

NH:  $5.7E+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2593	1	12 05 44.2	-29 21 07	52	*0.0102	0.0022	31.3	14.7	4.6	1.0	501	22.8	H	



MKW 45: CD GALAXIES IN POOR CLUSTERS

FIELD CENTER:  $12^h 04^m 06.0^s$   $28^\circ 26' 59''$  (B1950)  
 $12^h 06^m 38.9^s$   $28^\circ 10' 18''$  (J2000)  
 $l: 204.34$   $b: 80.03$

DATE: 1979/350 - 1979/350

LIVETIME: 1604.9s

ROLL ANGLE:  $-114.1^\circ$

NH:  $1.7E+20$

REF/ID:

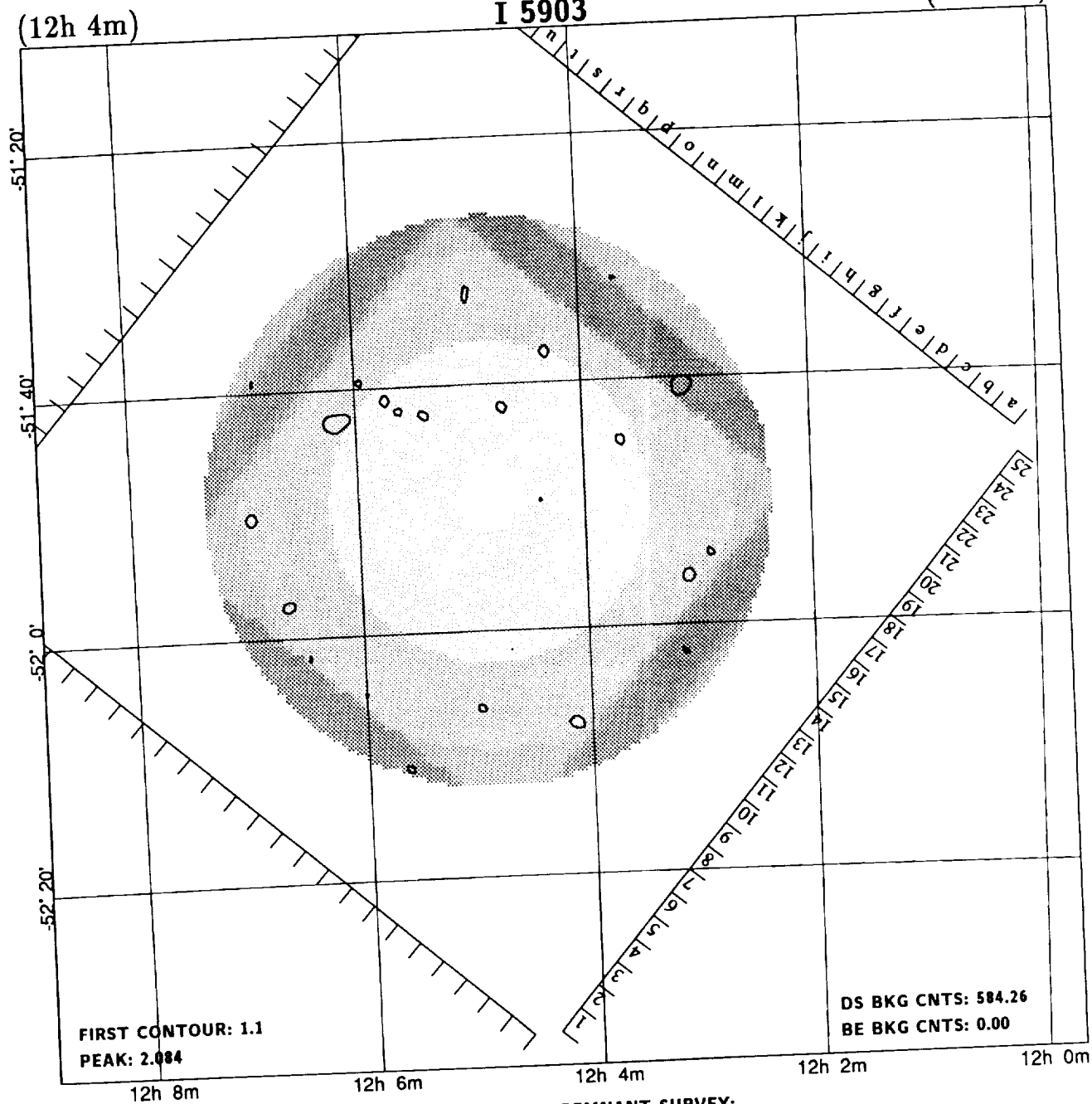
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2584	1	12 02 10.7	28 10 48	50	*0.103	0.014	58.0	3.0	7.4	1.5	1209	30.1	AH	Q
2589	2	12 04 06.1	28 26 40	36	0.0284	0.0053	34.0	6.0	5.4	1.6	0	0.4	AH	CLG
2591	3	12 05 20.0	28 19 30	51	0.0311	0.0063	27.6	3.4	5.0	1.0	200	18.2	H	

(12h 4m)

I 5903

(12h 4m)

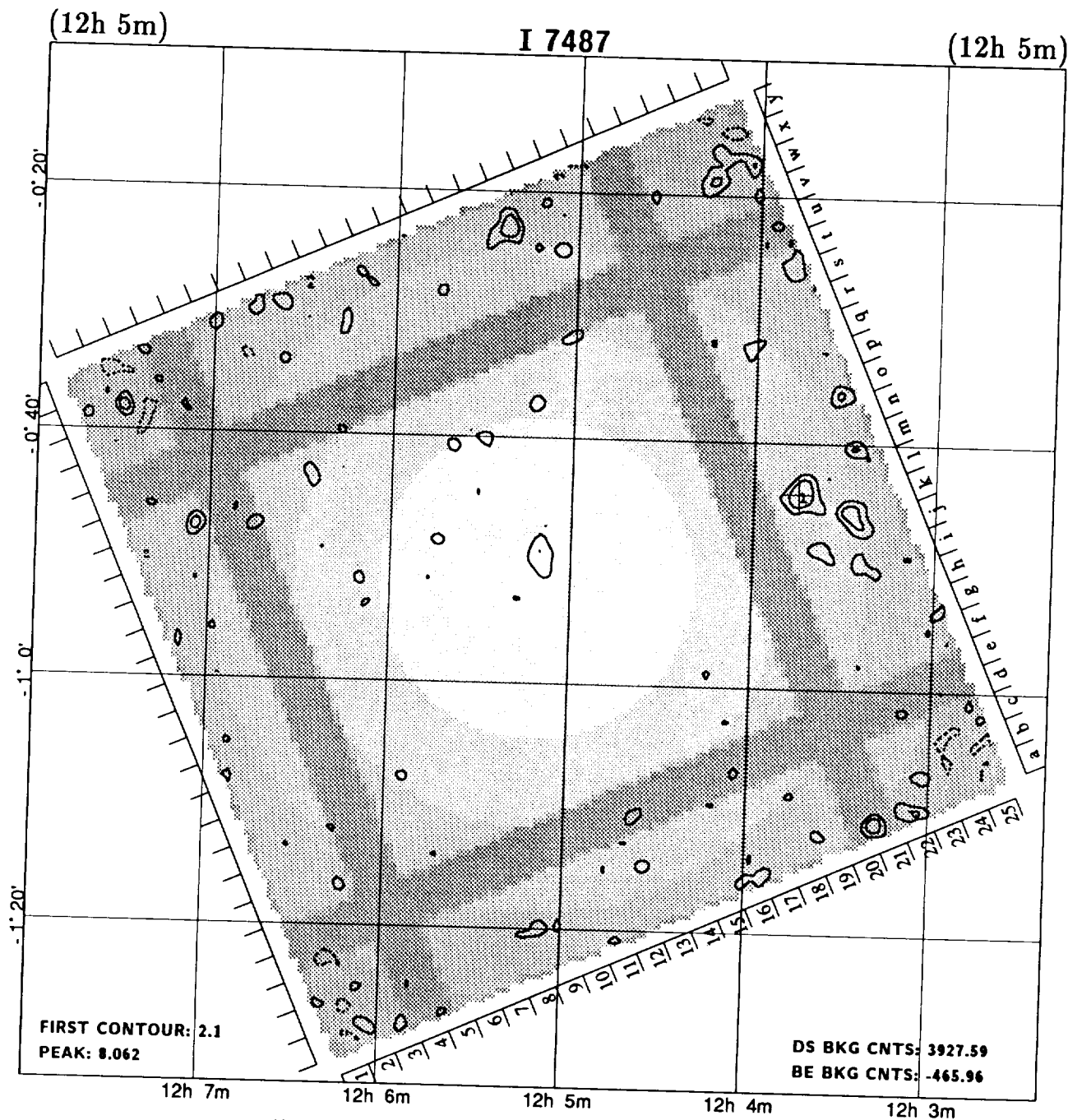


## SUPERNOVA REMNANT SURVEY:

FIELD CENTER:  $12^h 04^m 17.0^s$   $-51^\circ 53' 23''$  (B1950)  
 $12^h 06^m 52.8^s$   $-52^\circ 10' 05''$  (J2000)  
 $l: 296.02$   $b: 10.10$

DATE: 1980/ 38 - 1980/ 38  
 LIVETIME: 473.4s  
 ROLL ANGLE:  $-139.4^\circ$

NH:  $1.1E+21$   
 REF/ID:  
 FIELD FLAGS: L



1205-00, SURVEY OF X-RAY EMISSION FROM BL LAC OBJECTS

FIELD CENTER:  $12^h 05^m 09.5^s$   $-00^\circ 50' 59''$  (B1950)  
 $12^h 07^m 43.3^s$   $-01^\circ 07' 41''$  (J2000)  
 $\ell$ : 280.76  $b$ : 59.85

DATE: 1981/ 7 - 1981/ 7  
 LIVETIME: 3182.6s  
 ROLL ANGLE:  $-113.6^\circ$

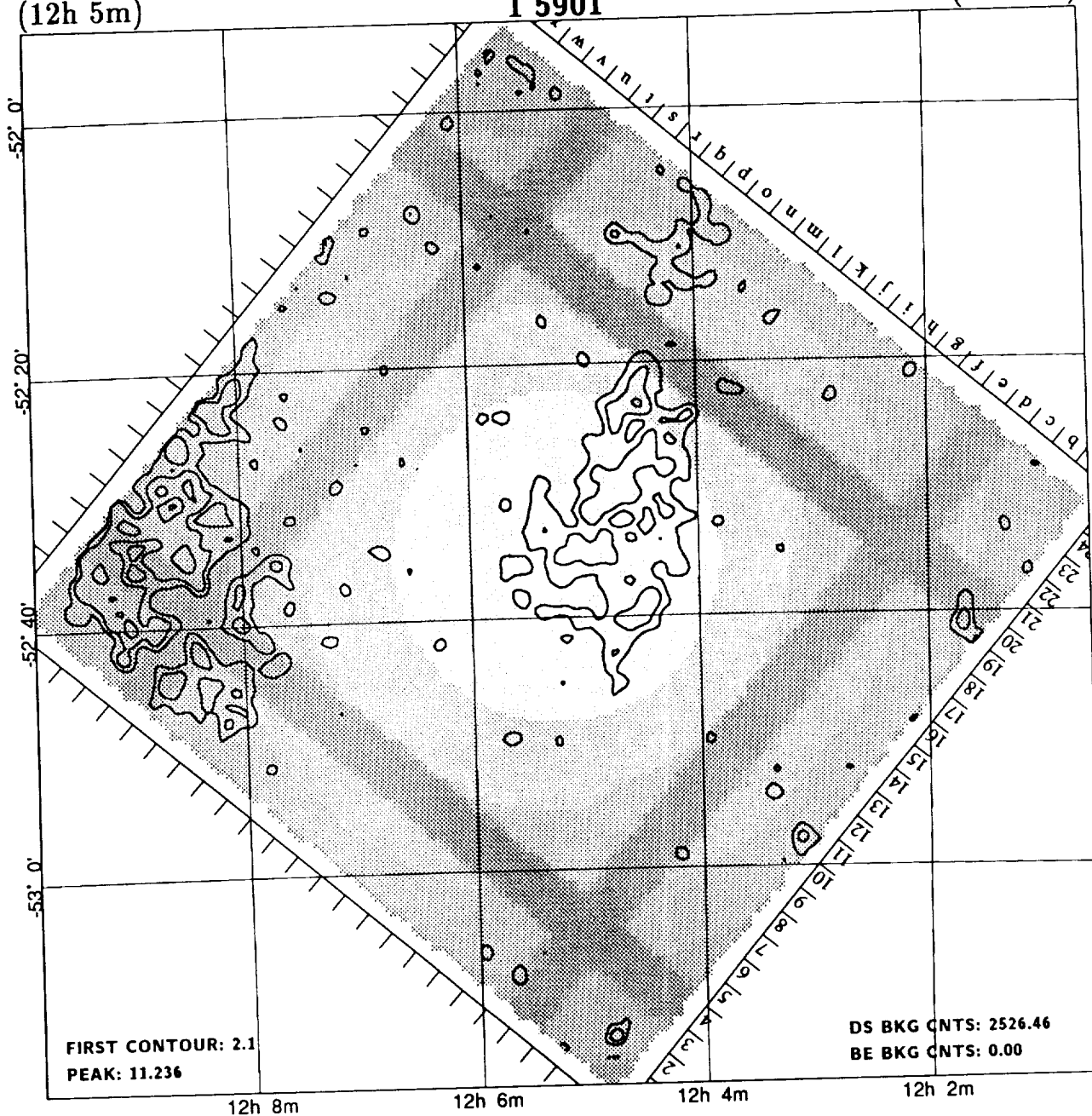
NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2586	1	12 03 45.2	-00 44 10	55	0.0137	0.0035	20.3	6.7	3.9	1.0	0	22.2	FLG

(12h 5m)

I 5901

(12h 5m)



FIRST CONTOUR: 2.1  
PEAK: 11.236

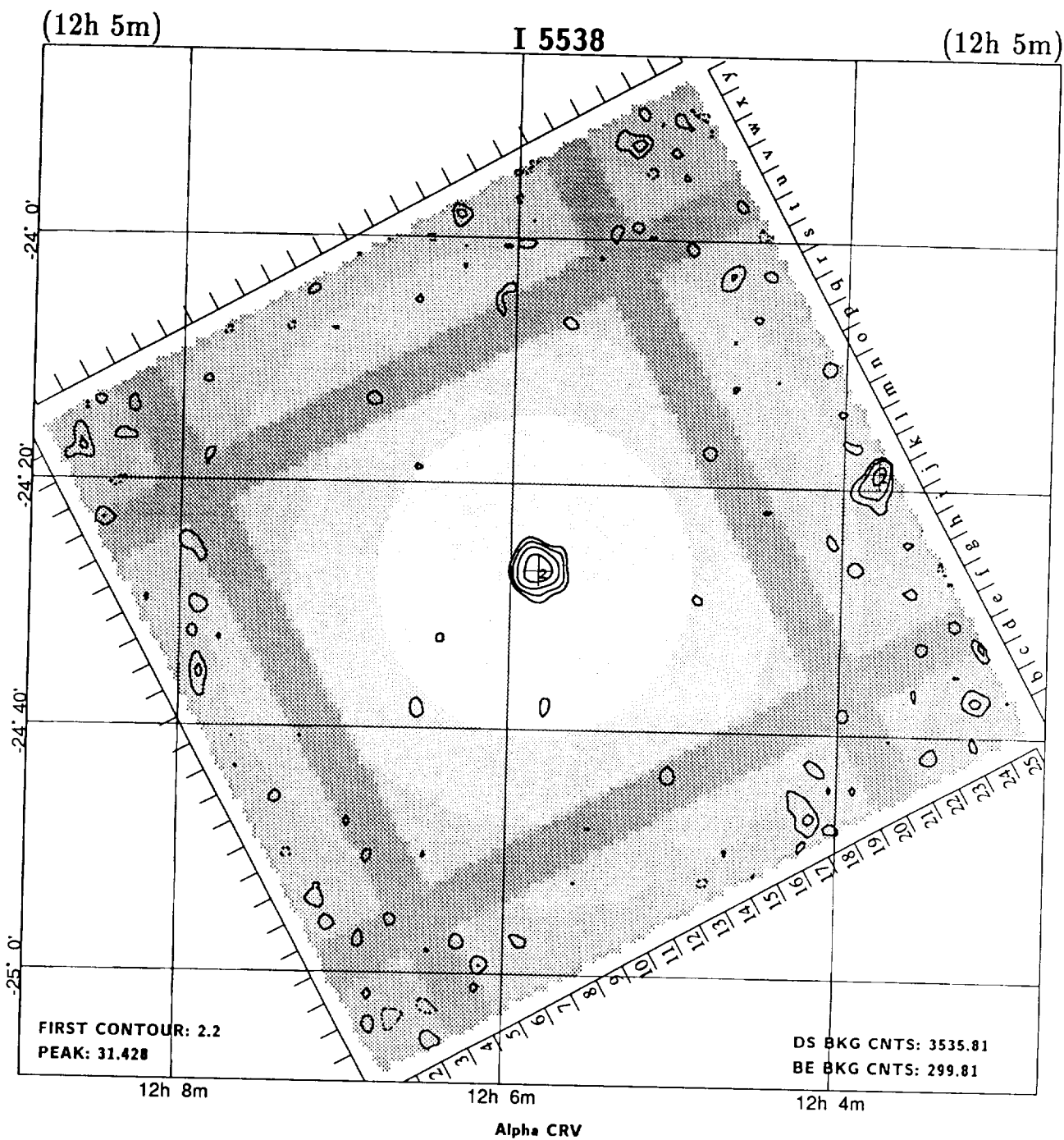
DS BKG CNTS: 2526.46  
BE BKG CNTS: 0.00

# SUPERNOVA REMNANT SURVEY:

FIELD CENTER:  $12^h 05^m 11.7^s$   $-52^\circ 34' 58''$  (B1950)  
 $12^h 07^m 47.9^s$   $-52^\circ 51' 40''$  (J2000)  
 $l: 296.28$   $b: 9.45$

DATE: 1980/ 38 - 1980/ 38  
 LIVETIME: 2047.3s  
 ROLL ANGLE:  $-139.9^\circ$

NH:  $1.2E+21$   
 REF/ID:  
 FIELD FLAGS: L



FIELD CENTER:  $12^h 05^m 50.0^s$   $-24^\circ 26' 59''$  (B1950)  
 $12^h 08^m 24.7^s$   $-24^\circ 43' 41''$  (J2000)  
 $\ell$ : 290.66  $b$ : 37.12

DATE: 1980/ 11 - 1980/ 11  
 LIVETIME: 2865.2s  
 ROLL ANGLE:  $-118.8^\circ$

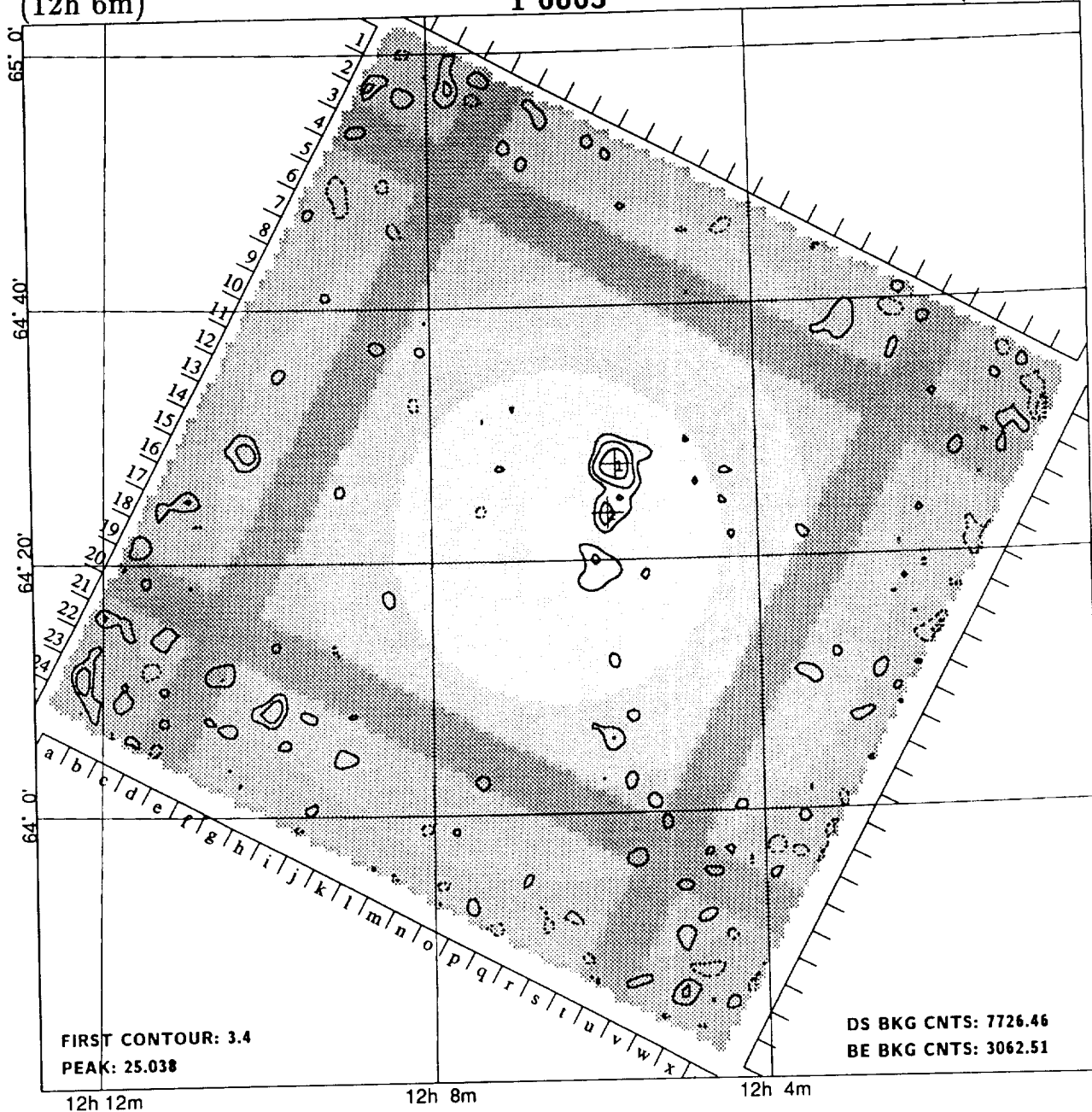
NH:  $7.4E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	$R'$	SRC FLG	ID
2587	1	12 03 47.3	-24 18 42	55	0.0222	0.0056	20.2	5.8	4.0	1.1	300	28.4	H	
2594	2	12 05 49.8	-24 27 05	31	0.0654	0.0057	139.6	9.4	11.4	1.3	0	0.2	H	

(12h 6m)

I 6865

(12h 6m)



A1477, CLUSTER LUMINOSITIES @ Z=0.25.

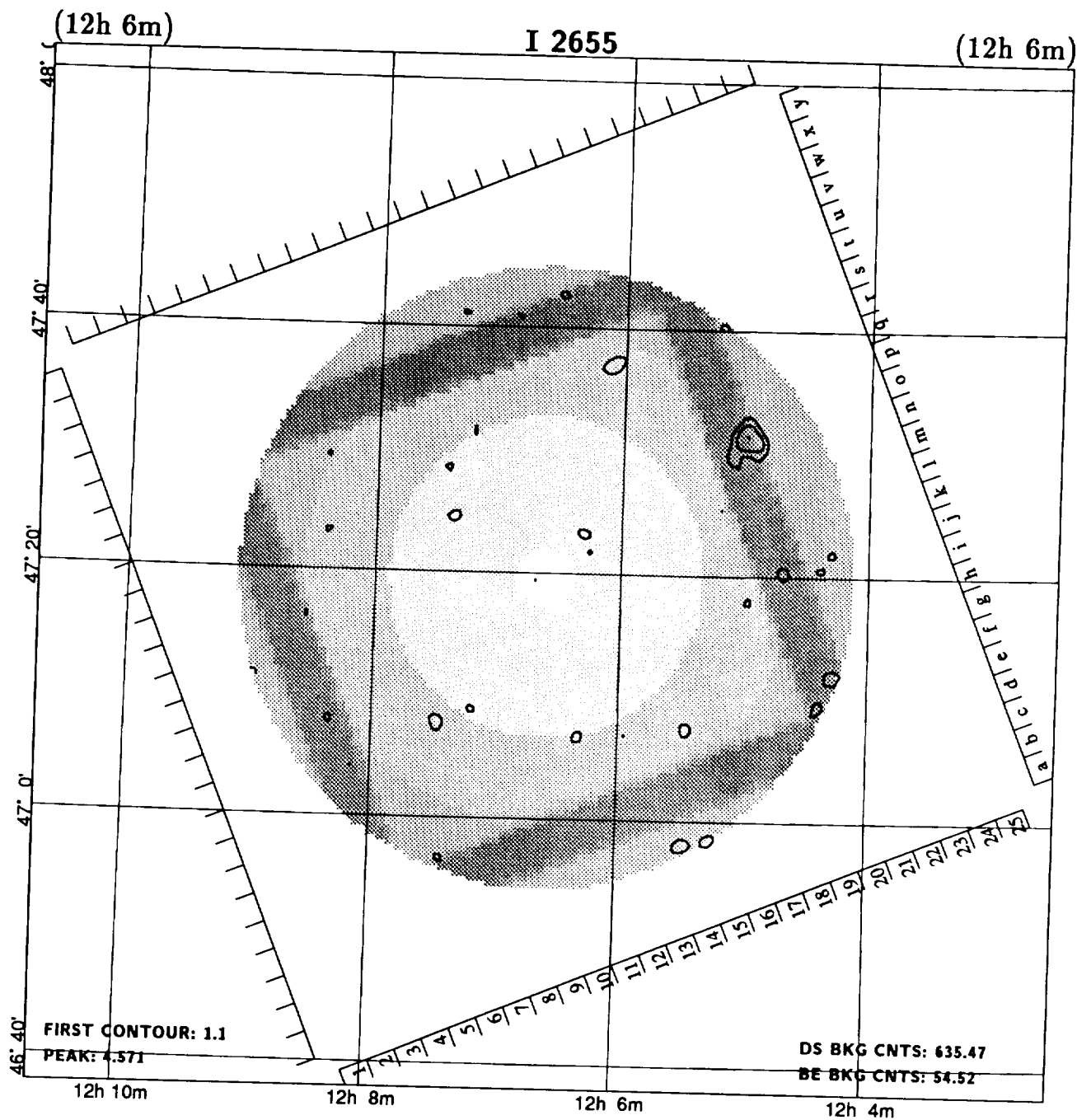
FIELD CENTER:  $12^h 06^m 24.0^s$   $64^\circ 20' 59''$  (B1950)  
 $12^h 08^m 53.1^s$   $64^\circ 04' 18''$  (J2000)  
 $l: 130.54$   $b: 52.42$

DATE: 1980/112 - 1980/113  
 LIVETIME: 6486.0s  
 ROLL ANGLE:  $27.9^\circ$

NH:  $2.0E+20$   
 REF/ID: CLG  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2592	1	12 05 43.9	64 27 30	38	0.0251	0.0026	112.9	28.1	9.5	1.6	0	7.7	H	AGN
2595	2	12 05 50.2	64 23 40	36	0.0072	0.0017	33.8	28.2	4.3	4.9	0	4.6	H	





SEYFERT GALAXY SURVEY: MKN 198:

FIELD CENTER:  $12^{\text{h}}06^{\text{m}}36.0^{\text{s}}$   $47^{\circ}19'59''$  (B1950)  
 $12^{\text{h}}09^{\text{m}}07.3^{\text{s}}$   $47^{\circ}03'18''$  (J2000)  
 $l$ : 142.80  $b$ : 68.41

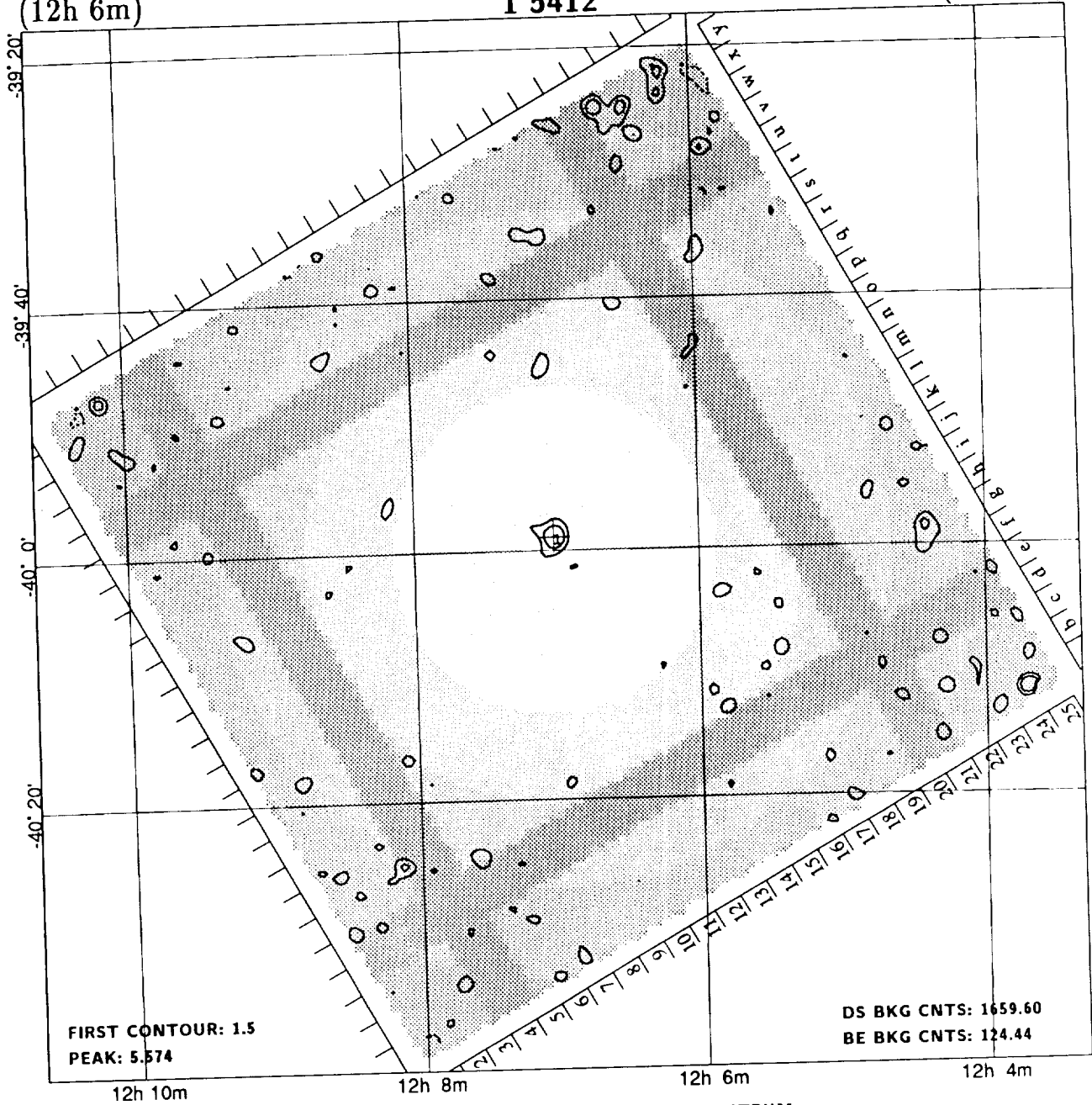
DATE: 1979/350 - 1979/350  
 LIVETIME: 514.9s  
 ROLL ANGLE:  $-112.1^{\circ}$

NH:  $1.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 6m)

I 5412

(12h 6m)



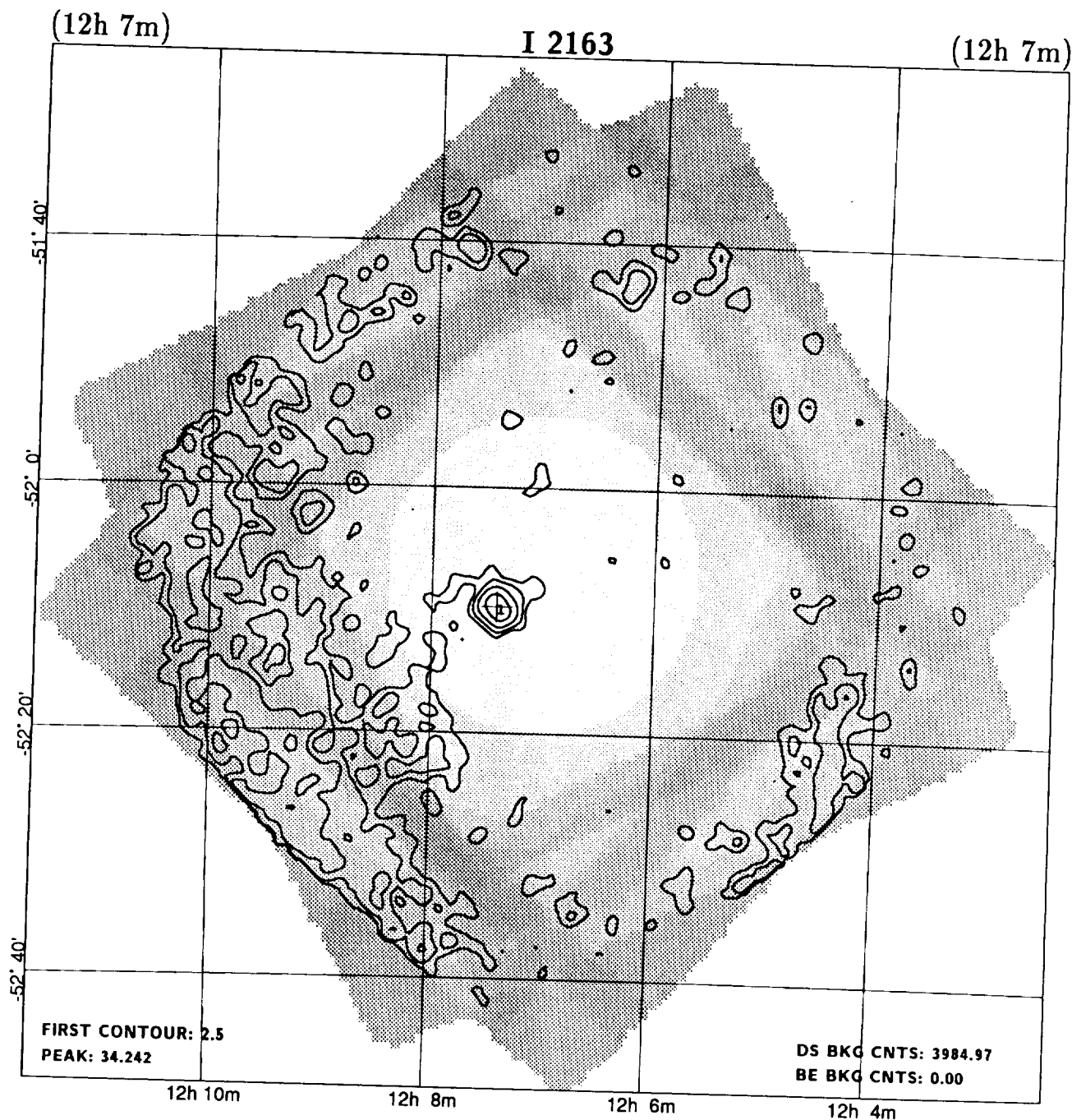
1207-399,QSO'S WITH RADIO FLAT SPECTRUM

FIELD CENTER:  $12^h 06^m 59.6^s$   $-39^\circ 59' 30''$  (B1950)  
 $12^h 09^m 35.4^s$   $-40^\circ 16' 12''$  (J2000)  
 $l: 294.34$   $b: 21.90$

DATE: 1980/ 11 - 1980/ 11  
 LIVETIME: 1344.8s  
 ROLL ANGLE:  $-119.3^\circ$

NH:  $7.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2597	1	12 07 01.2	-39 58 55	37	0.0186	0.0048	18.6	4.4	3.9	0.8	0	0.6	H	Q



X-RAY STUDY OF SUPERNOVA REMNANTS: G296.5+10.0=PKS1209-51/52

FIELD CENTER:  $12^h 07^m 00.0^s$   $-52^\circ 06' 59''$  (B1950)  
 $12^h 09^m 36.8^s$   $-52^\circ 23' 41''$  (J2000)  
 $l: 296.48$   $b: 9.95$

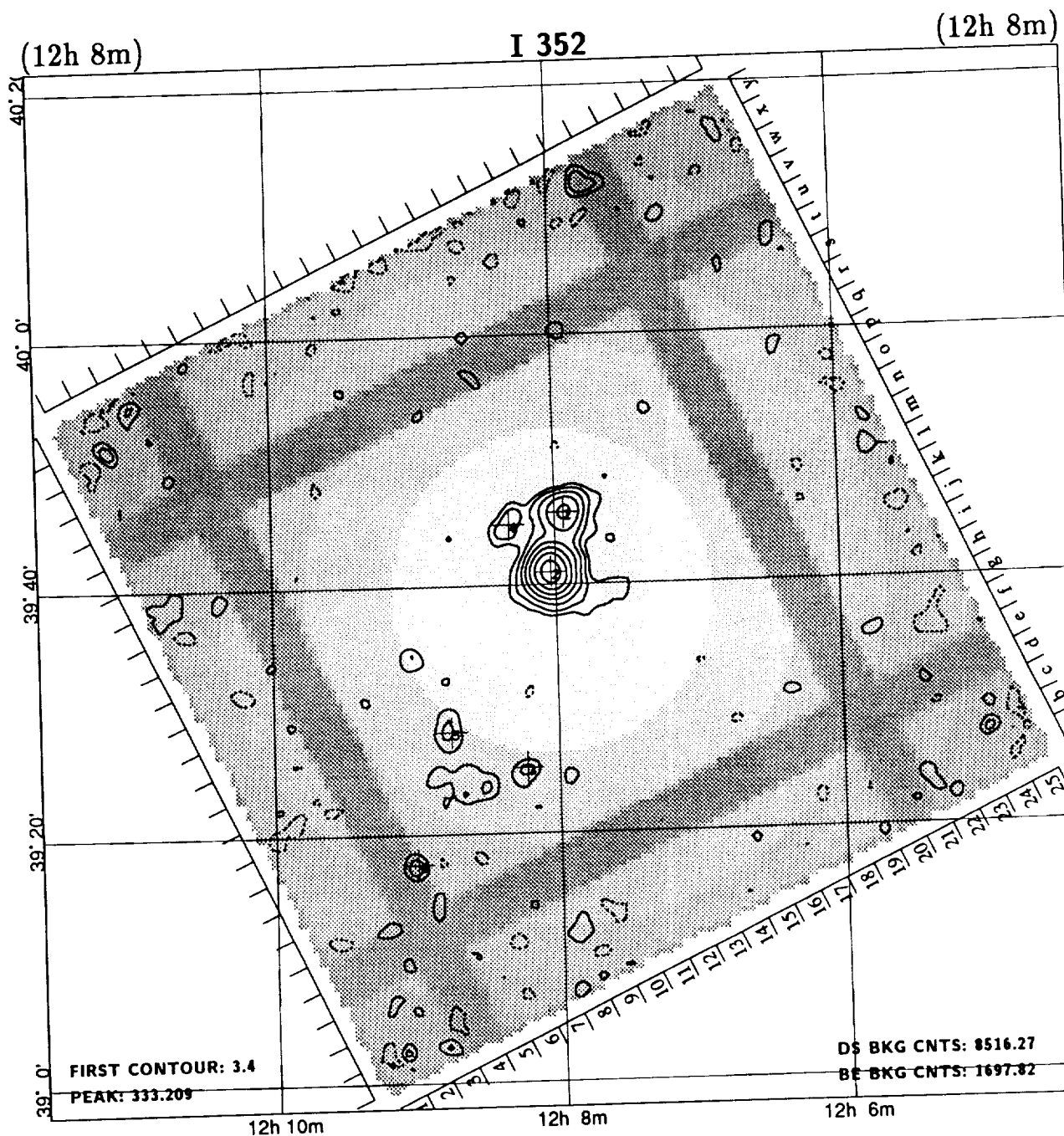
DATE: 1979/192 - 1980/ 38  
 LIVETIME: 3229.1s

NH:  $1.1E+21$

REF/ID:

FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2599	1L	12 07 24.9	-52 09 39	31	0.0503	0.0062	117.2	36.8	8.0	1.4	0	4.6	A	SNR



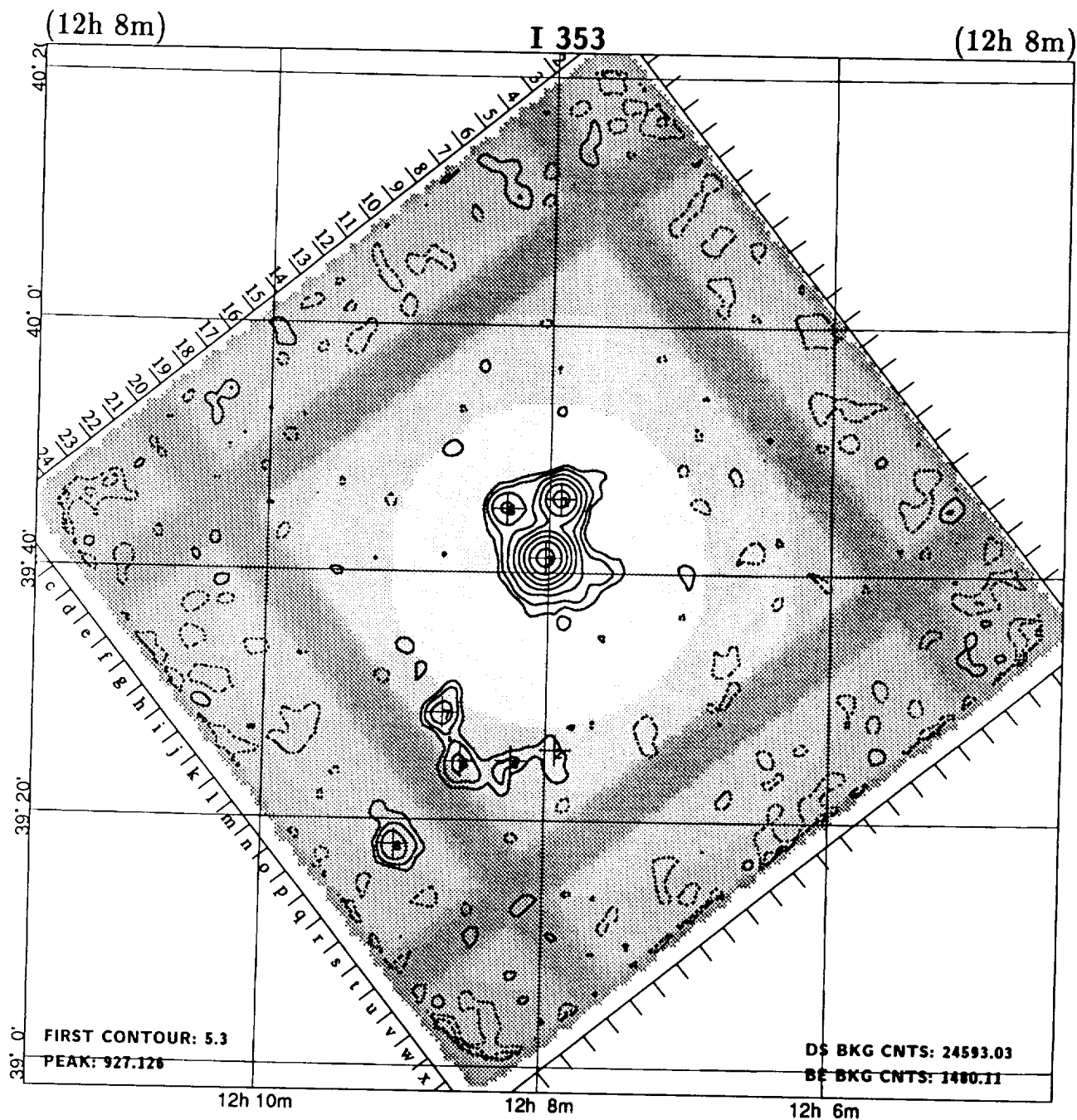
# NGC 4151 SEYFERT VARIABILITY STUDY

FIELD CENTER:  $12^h 08^m 00.0^s$   $39^\circ 39' 59''$  (B1950)  
 $12^h 10^m 31.5^s$   $39^\circ 23' 18''$  (J2000)  
 $l: 155.13$   $b: 75.07$

DATE: 1979/346 - 1979/347  
 LIVETIME: 6901.0s  
 ROLL ANGLE:  $-115.6^\circ$

NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS: CD

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2600	1	12 07 56.3	39 45 43	38	0.0530	0.0035	256.6	22.4	15.4	7.9	0	6.0	AH	AGN
2603	2	12 08 01.9	39 41 01	31	0.2642	0.0073	1348.2	25.8	36.4	1.6	0	1.3	AH	SY
2605	3	12 08 13.7	39 25 14	53	0.0058	0.0016	23.9	21.1	3.6	0.7	0	15.1	AH	
2606	4	12 08 19.5	39 44 48	41	0.0104	0.0018	50.4	24.6	5.8	41.9	0	6.2	AH	G
2608	5	12 08 45.6	39 28 09	52	0.0060	0.0017	24.9	24.1	3.6	0.8	0	15.0	AH	CLG
2611	6	12 09 00.6	39 17 36	57	*0.0068	0.0019	20.5	12.5	3.6	0.6	907	25.2	A	



# NGC 4151 SEYFERT VARIABILITY STUDY

FIELD CENTER: 12<sup>h</sup>08<sup>m</sup>00.0<sup>s</sup> 39°39'59" (B1950)  
12<sup>h</sup>10<sup>m</sup>31.5<sup>s</sup> 39°23'18" (J2000)  
ℓ: 155.13 b: 75.07

DATE: 1979/138 - 1979/140  
LIVETIME: 19928.5s  
ROLL ANGLE: 51.2°

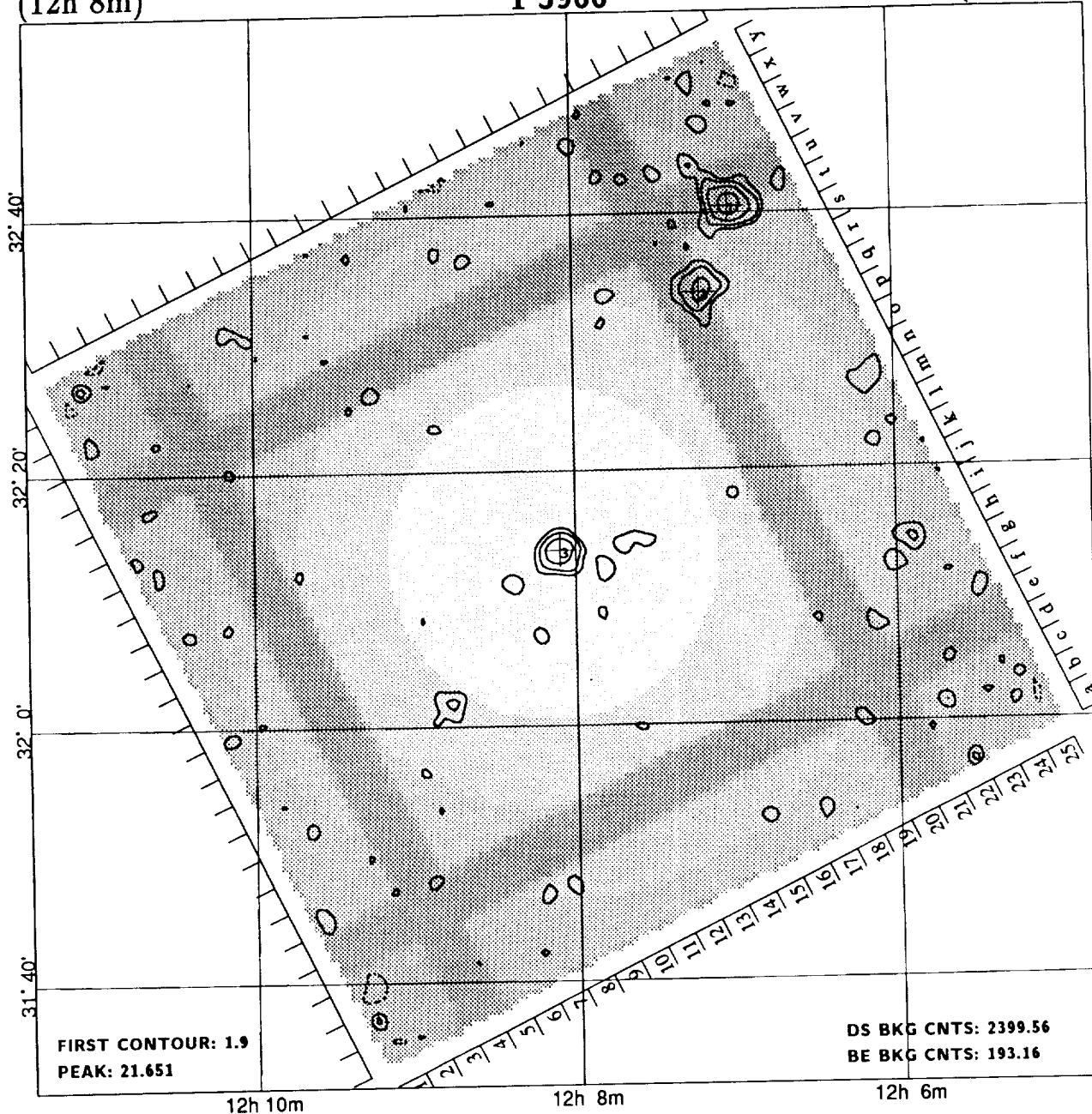
NH: 2.1E+20  
REF/ID:  
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2600	1	12 07 55.2	39 45 59	37	0.0617	0.0022	875.7	65.3	28.5	6.9	0	6.1	A	AGN
2601	2	12 07 55.9	39 25 43	48	0.00272	0.00077	32.1	49.9	3.5	10.3	0	13.7		
2603	3	12 08 01.4	39 41 13	31	0.2596	0.0042	3860.8	66.2	61.6	1.7	0	1.3	AH	SY
2605	4	12 08 14.6	39 24 50	55	0.00320	0.00084	36.6	54.4	3.8	7.9	0	15.3	A	
2606	5	12 08 18.2	39 45 11	38	0.0140	0.0012	198.3	67.7	12.2	30.5	0	6.5	A	G
2607	6	12 08 36.0	39 24 44	50	*0.0069	0.0010	75.6	48.4	6.8	3.6	601	16.6	H	S
2608	7	12 08 44.0	39 28 44	38	0.0095	0.0011	112.5	53.5	8.7	2.9	100	14.1	A	CLG
2611	8	12 09 03.4	39 17 58	50	0.0115	0.0014	96.2	38.8	8.3	1.2	0	25.1	AH	

(12h 8m)

I 3966

(12h 8m)



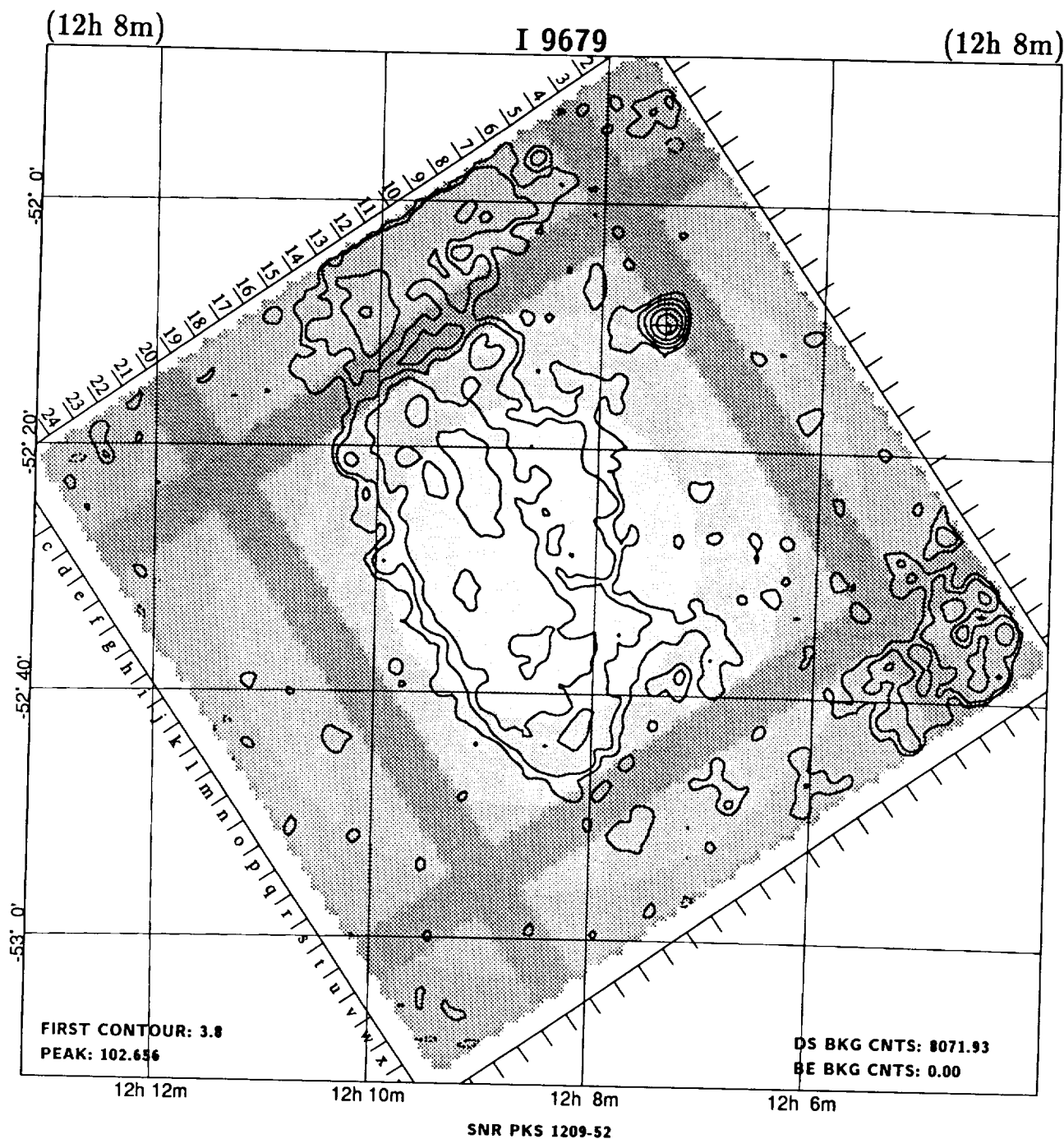
1208+322, BRIGHT NEARBY QUASAR

FIELD CENTER:  $12^h 08^m 05.4^s$   $32^\circ 13' 48''$  (B1950)  
 $12^h 10^m 37.4^s$   $31^\circ 57' 07''$  (J2000)  
 $l: 181.96$   $b: 79.90$

DATE: 1979/346 - 1979/346  
 LIVETIME: 1944.5s  
 ROLL ANGLE:  $-116.2^\circ$

NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2596	1	12 07 00.9	32 40 29	50	*0.065	0.010	43.1	2.9	6.4	1.4	1109	30.0	H	
2598	2	12 07 12.2	32 33 49	51	*0.0318	0.0063	28.1	2.9	5.1	1.2	1108	22.9	H	
2604	3	12 08 05.8	32 13 51	35	0.0368	0.0053	53.4	6.6	6.9	1.2	0	0.4	H	



FIELD CENTER:  $12^{\text{h}}08^{\text{m}}30.0^{\text{s}}$   $-52^{\circ}29'59''$  (B1950)  
 $12^{\text{h}}11^{\text{m}}07.5^{\text{s}}$   $-52^{\circ}46'41''$  (J2000)  
 $l: 296.77$   $b: 9.61$

DATE: 1980/203 - 1980/203  
 LIVETIME: 6540.9s  
 ROLL ANGLE:  $55.2^{\circ}$

NH:  $1.1\text{E}+21$   
 REF/ID:  
 FIELD FLAGS: DLS

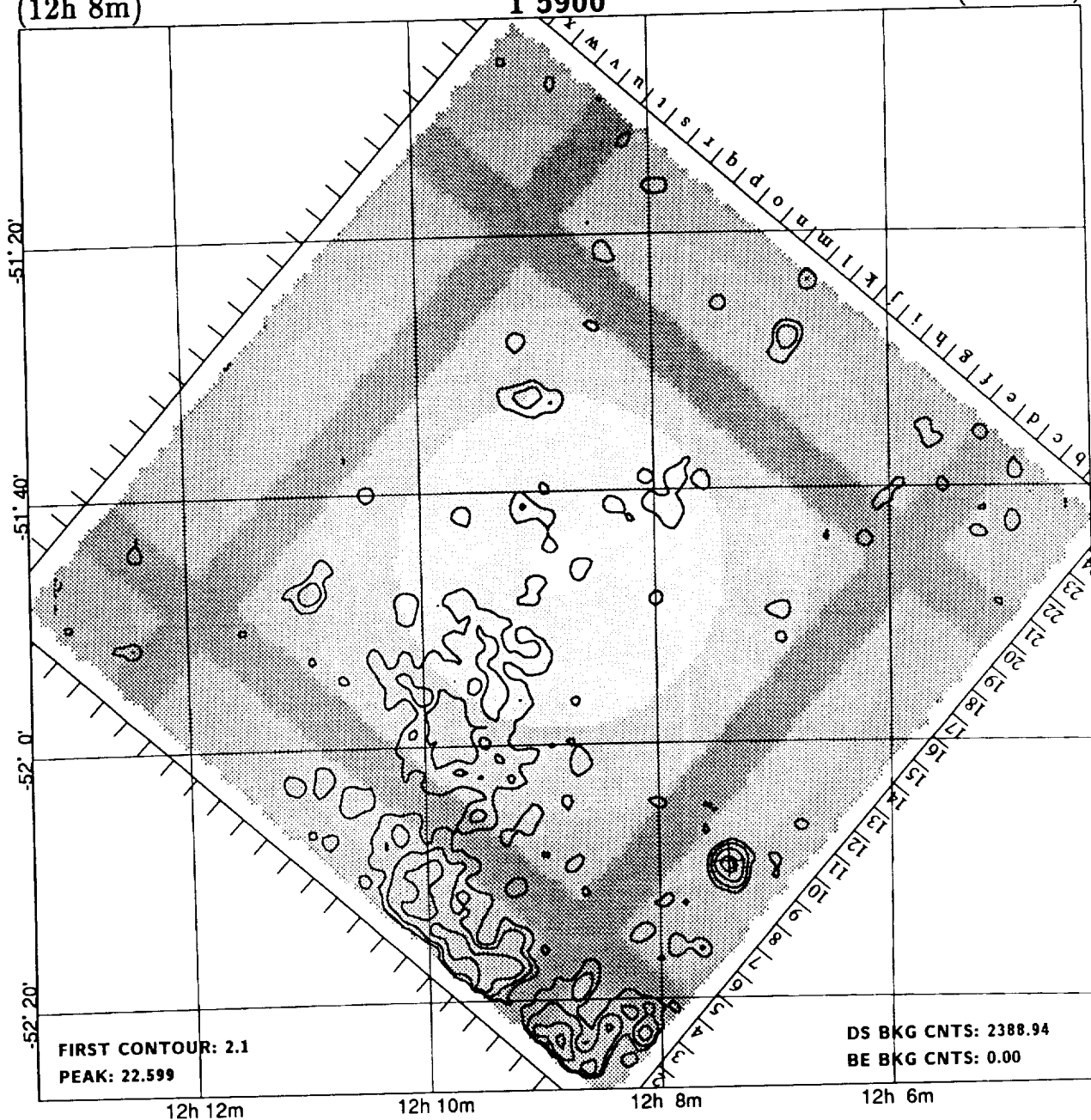
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2599	1L	12 07 25.5	-52 09 49	47	*0.0861	0.0081	272.3	15.7	10.5	1.2	804	22.5	A	SNR



(12h 8m)

I 5900

(12h 8m)



FIRST CONTOUR: 2.1  
PEAK: 22.599

DS BKG CNTS: 2388.94  
BE BKG CNTS: 0.00

## SUPERNOVA REMNANT SURVEY:

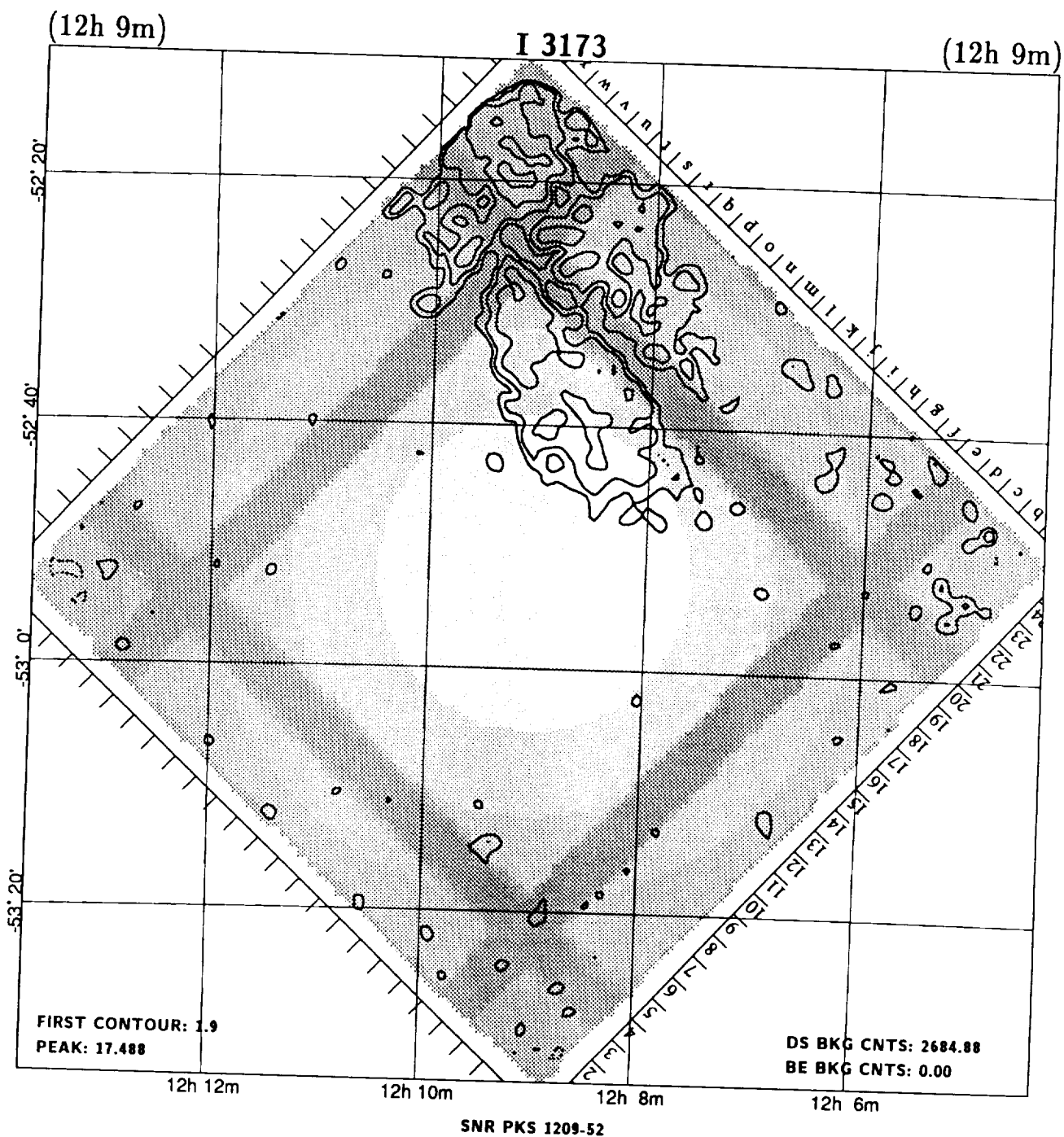
FIELD CENTER:  $12^h 08^m 48.2^s$   $-51^\circ 44' 59''$  (B1950)  
 $12^h 11^m 25.7^s$   $-52^\circ 01' 41''$  (J2000)  
 $\ell$ : 296.70  $b$ : 10.36

DATE: 1980/ 38 - 1980/ 38  
LIVETIME: 1935.8s  
ROLL ANGLE:  $-138.9^\circ$

NH:  $1.1E+21$   
REF/ID:  
FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2599	1L	12 07 24.3	-52 09 21	50	0.059	0.010	45.5	4.5	5.6	1.0	0	27.7	A	SNR





FIELD CENTER:  $12^h 09^m 00.0^s$   $-52^\circ 51' 59''$  (B1950)  
 $12^h 11^m 37.7^s$   $-53^\circ 08' 41''$  (J2000)  
 $l: 296.90$   $b: 9.26$

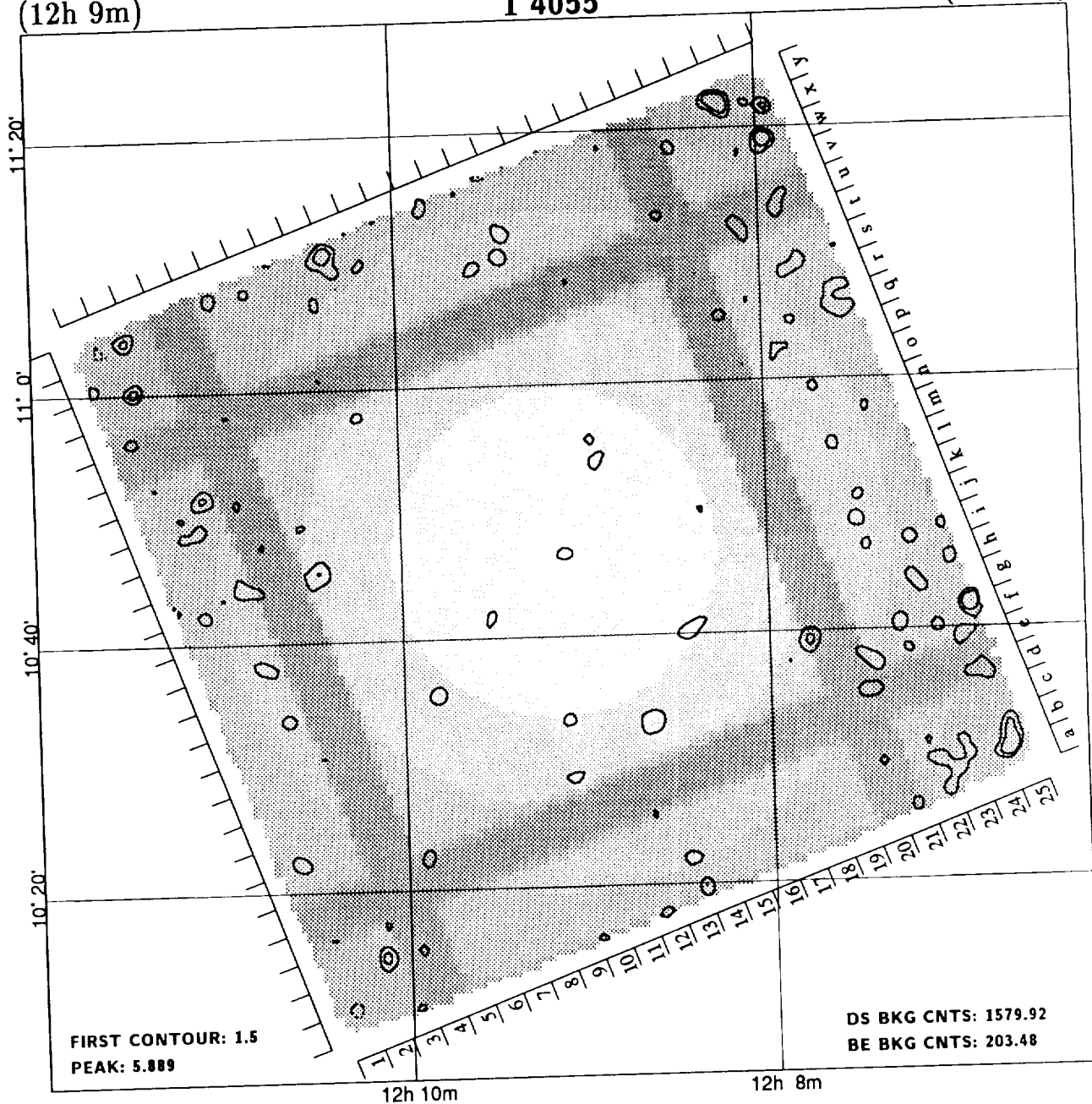
DATE: 1980/ 36 - 1980/ 36  
 LIVETIME: 2175.7s  
 ROLL ANGLE:  $-137.3^\circ$

NH:  $1.2E+21$   
 REF/ID:  
 FIELD FLAGS: LS

(12h 9m)

I 4055

(12h 9m)

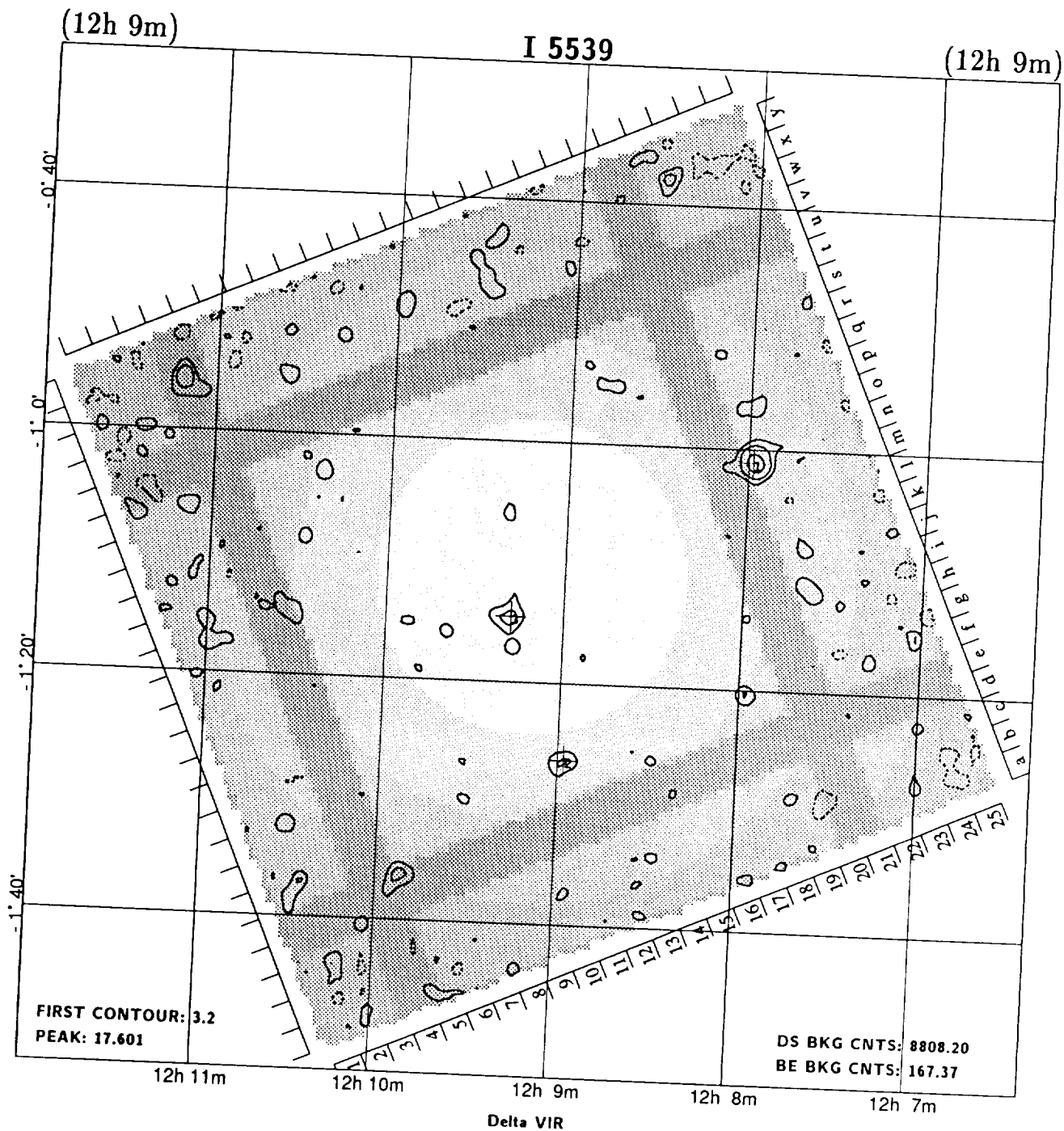


HIGH REDSHIFT QUASAR

FIELD CENTER:  $12^h 09^m 08.0^s$   $10^\circ 46' 57''$  (B1950)  
 $12^h 11^m 41.2^s$   $10^\circ 30' 16''$  (J2000)  
 $l: 271.66$   $b: 70.92$

DATE: 1979/355 - 1979/355  
LIVETIME: 1280.3s  
ROLL ANGLE:  $-110.4^\circ$

NH:  $1.9E+20$   
REF/ID:  
FIELD FLAGS:

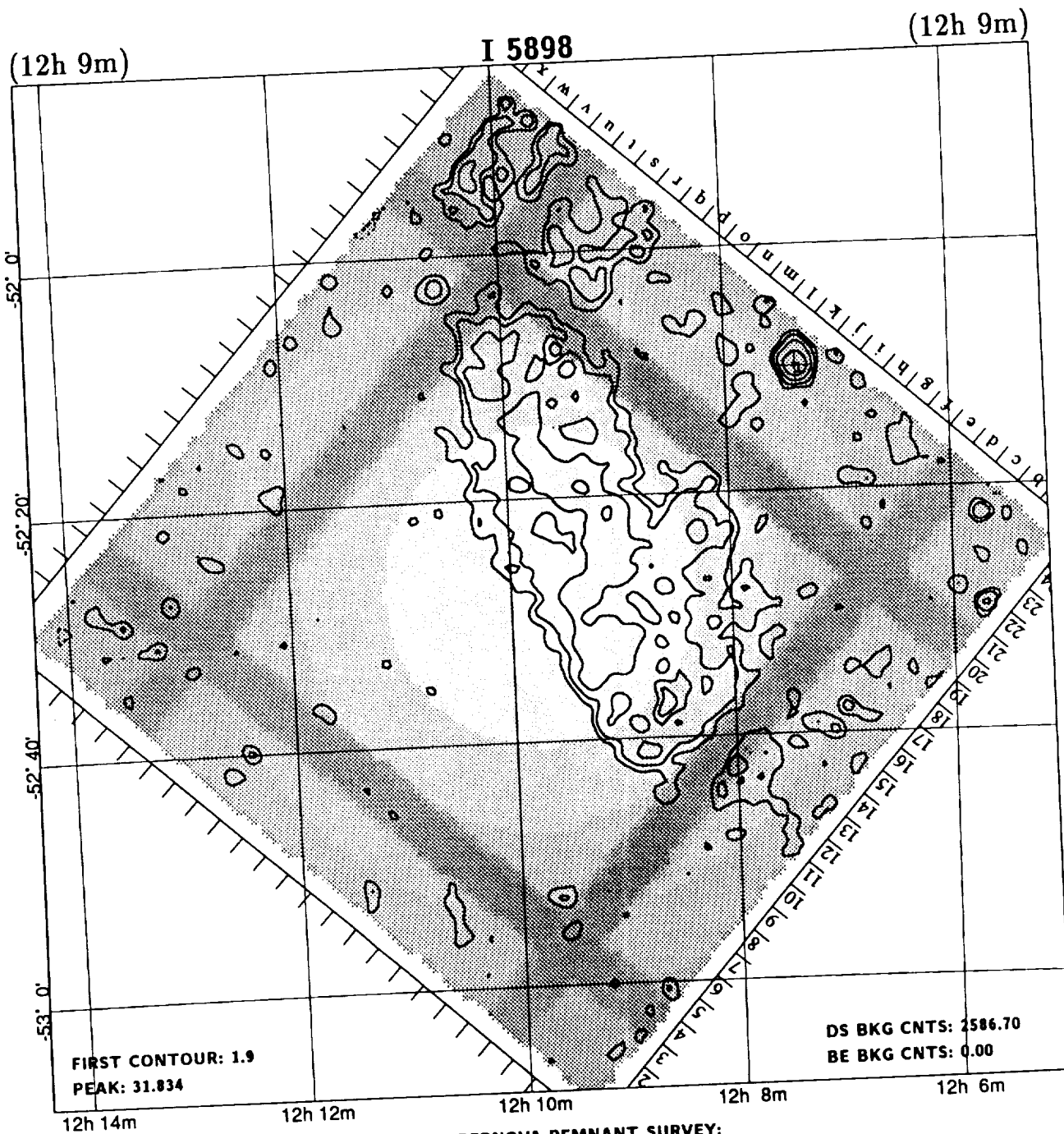


FIELD CENTER:  $12^{\text{h}}09^{\text{m}}09.7^{\text{s}}$   $-01^{\circ}10'41''$  (B1950)  
 $12^{\text{h}}11^{\text{m}}43.5^{\text{s}}$   $-01^{\circ}27'23''$  (J2000)  
 $l: 282.86$   $b: 59.86$

DATE: 1980/349 - 1980/349  
 LIVETIME: 7137.6s  
 ROLL ANGLE:  $-113.5^{\circ}$

NH:  $2.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2602	1	12 07 58.4	-01 01 06	50	*0.0136	0.0022	48.3	12.7	6.2	1.1	704	20.2	H
2610	2	12 08 57.9	-01 26 22	56	0.0055	0.0015	22.9	18.1	3.6	0.7	0	16.0	
2612	3	12 09 17.8	-01 14 30	36	0.0055	0.0014	28.7	22.3	4.0	0.8	0	4.4	H



**SUPERNOVA REMNANT SURVEY:**

FIELD CENTER:  $12^{\text{h}}09^{\text{m}}42.9^{\text{s}}$   $-52^{\circ}26'34''$  (B1950)  
 $12^{\text{h}}12^{\text{m}}20.8^{\text{s}}$   $-52^{\circ}43'16''$  (J2000)  
 $l: 296.95$   $b: 9.70$

DATE: 1980/ 38 - 1980/ 38  
 LIVETIME: 2096.1s  
 ROLL ANGLE:  $-138.5^{\circ}$

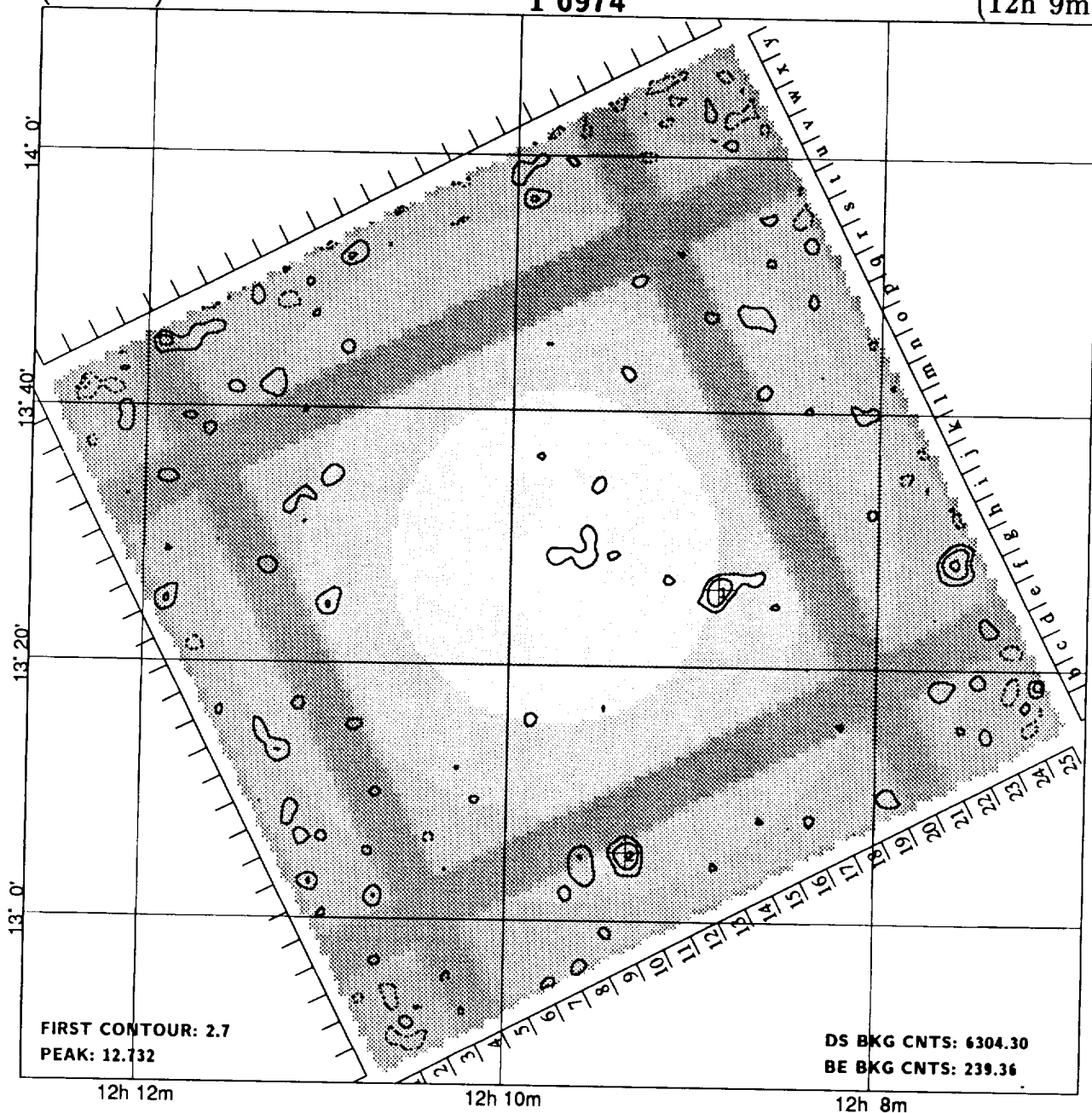
NH:  $1.1\text{E}+21$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2599	1L	12 07 22.3	-52 09 58	50	0.055	0.011	44.6	12.4	4.9	1.0	0	27.2	A	SNR

(12h 9m)

I 6974

(12h 9m)



## NGC 4165/4164/4168, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}09^{\text{m}}44.4^{\text{s}}$   $13^{\circ}28'59''$  (B1950)  
 $12^{\text{h}}12^{\text{m}}17.4^{\text{s}}$   $13^{\circ}12'18''$  (J2000)  
 $l: 267.68$   $b: 73.34$

DATE: 1979/340 - 1979/340

NH:  $2.6\text{E}+20$ 

LIVETIME: 5108.6s

REF/ID:

ROLL ANGLE:  $-117.2^{\circ}$ 

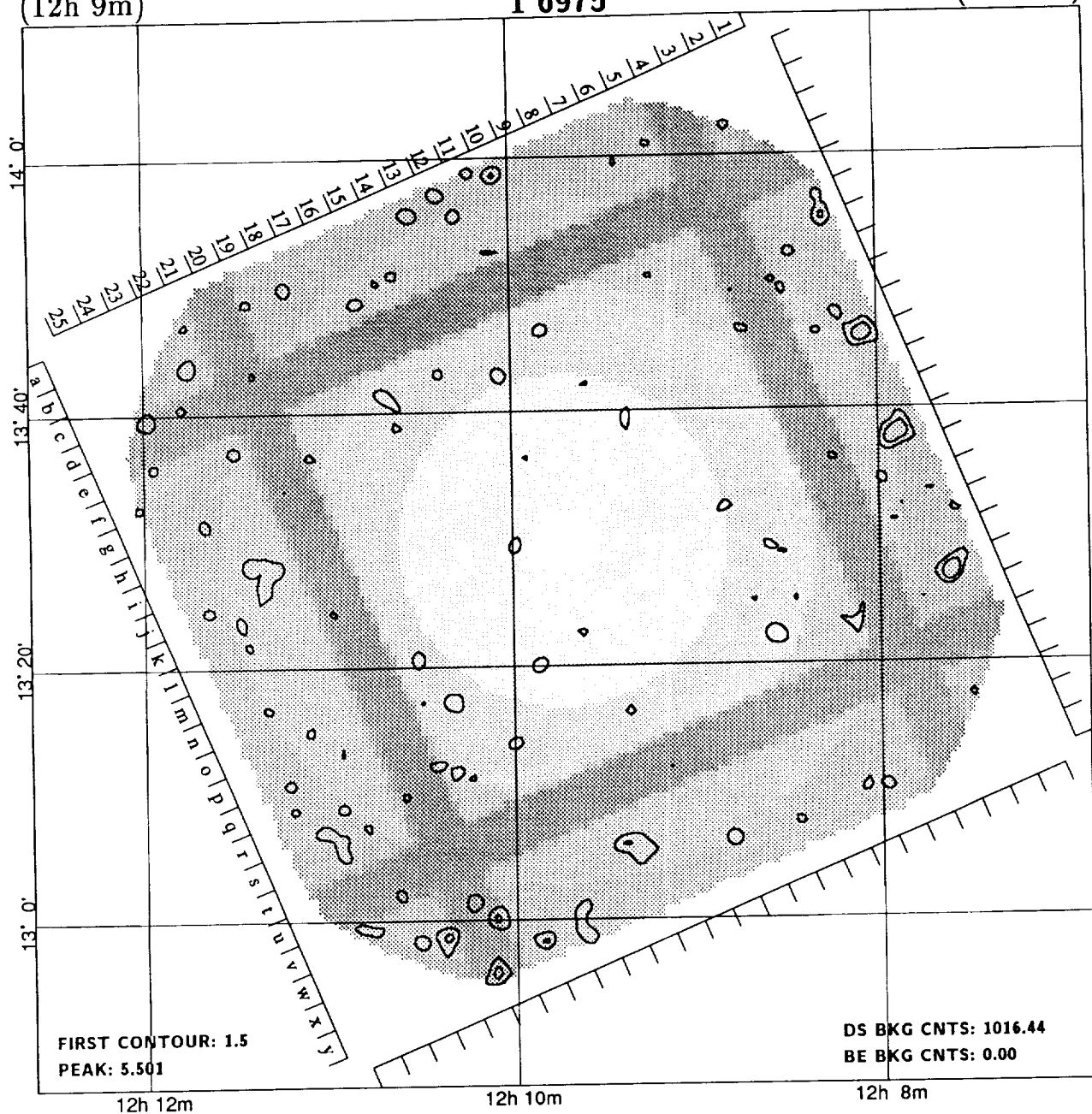
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2609	1	12 08 51.7	13 26 08	42	0.0093	0.0021	29.4	13.6	4.5	1.0	0	13.2	H	
2613	2	12 09 20.6	13 05 23	52	*0.0102	0.0025	23.4	9.6	4.1	0.9	702	24.1	H	

(12h 9m)

I 6975

(12h 9m)



## NGC 4165/4164/4168, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 09^m 44.4^s$   $13^\circ 28' 59''$  (B1950)  
 $12^h 12^m 17.4^s$   $13^\circ 12' 18''$  (J2000)  
 $l: 267.68$   $b: 73.34$

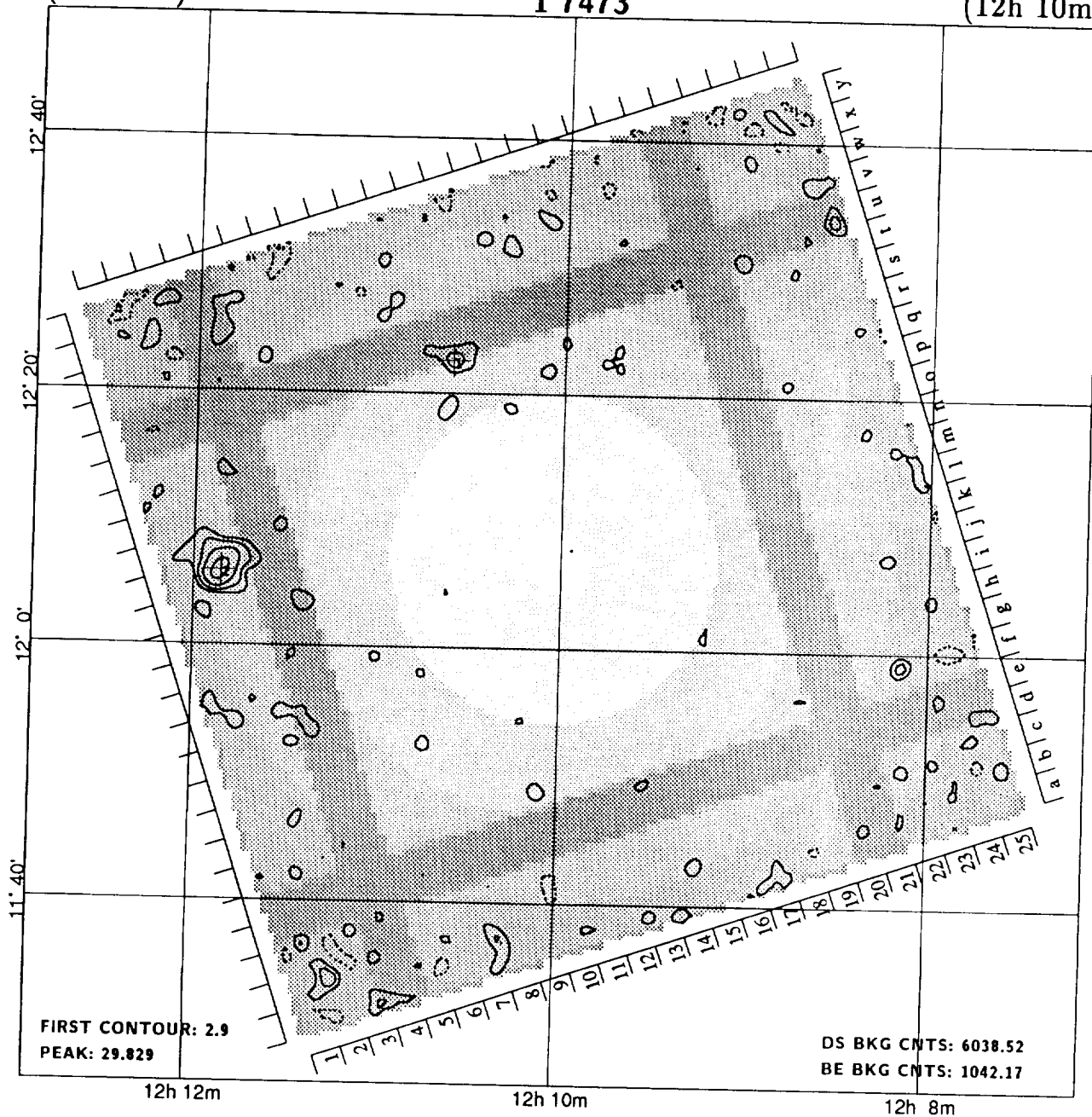
DATE: 1980/176 - 1980/176  
 LIVETIME: 823.7s  
 ROLL ANGLE:  $67.2^\circ$

NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS: CL

(12h 10m)

I 7473

(12h 10m)



FIELD CENTER:  $12^h 10^m 00.8^s$   $12^\circ 07' 38''$  (B1950)  
 $12^h 12^m 33.8^s$   $11^\circ 50' 58''$  (J2000)  
 $l: 270.21$   $b: 72.20$

DATE: 1981/ 10 - 1981/ 10  
 LIVETIME: 4893.2s  
 ROLL ANGLE:  $-108.6^\circ$

NH:  $2.3E+20$   
 REF/ID:  
 FIELD FLAGS:

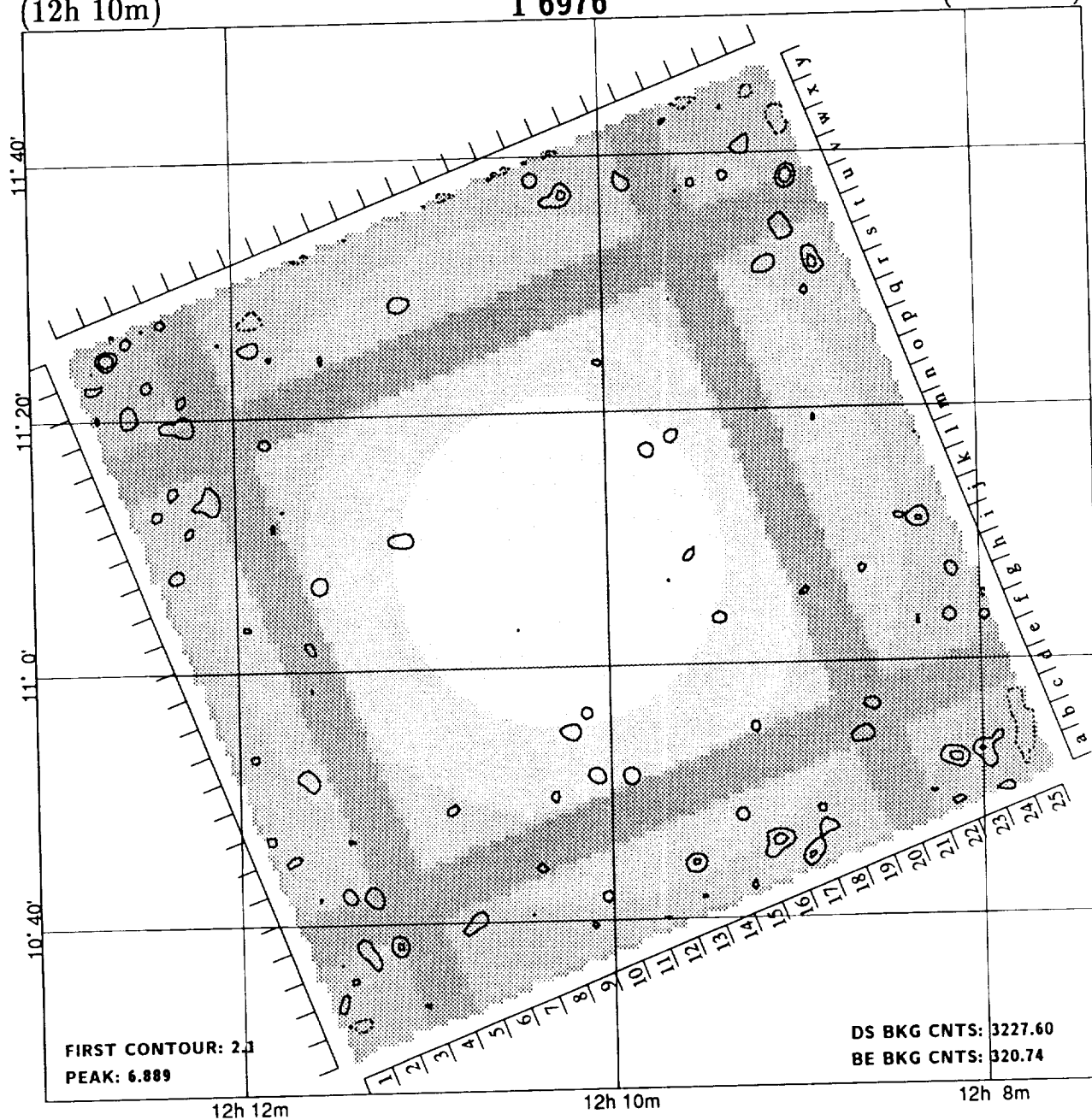
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2616	1	12 10 36.8	12 22 31	55	*0.0074	0.0021	20.0	11.0	3.6	0.9	907	17.5	H	
2621	2	12 11 51.0	12 05 53	50	0.0368	0.0046	73.0	11.0	8.0	1.4	200	26.8	H	



(12h 10m)

I 6976

(12h 10m)



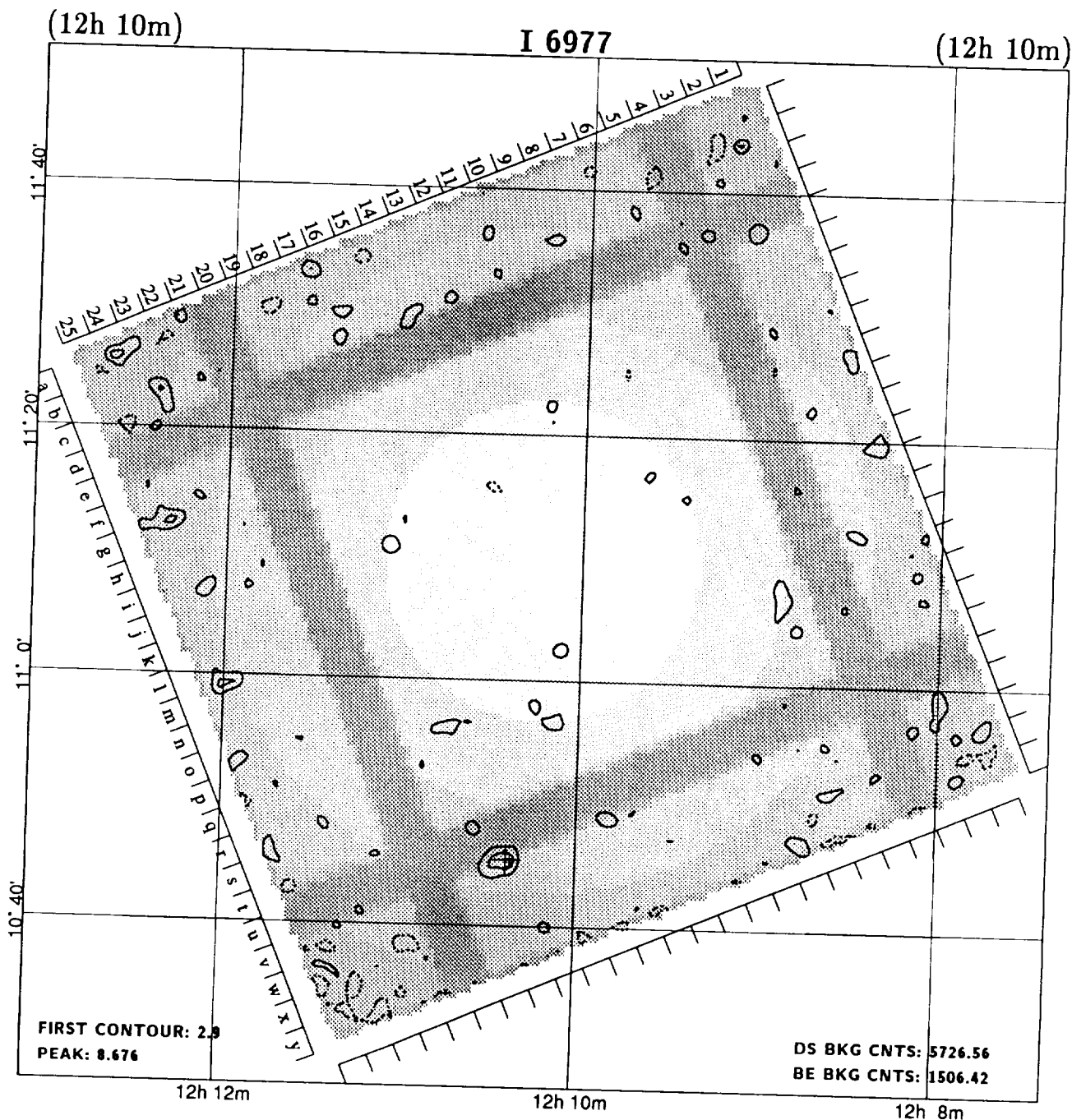
## NGC 4178, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 10^m 13.8^s$   $11^\circ 08' 47''$  (B1950)  
 $12^h 12^m 46.9^s$   $10^\circ 52' 07''$  (J2000)  
 $l: 271.86$   $b: 71.37$

DATE: 1979/350 - 1979/351  
 LIVETIME: 2615.4s  
 ROLL ANGLE:  $-111.4^\circ$

NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS: C





NGC 4178, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 10^m 13.8^s$   $11^\circ 08' 47''$  (B1950)  
 $12^h 12^m 46.9^s$   $10^\circ 52' 07''$  (J2000)  
 $\ell$ : 271.86  $b$ : 71.37

DATE: 1980/177 - 1980/177  
 LIVETIME: 4640.4s  
 ROLL ANGLE:  $67.2^\circ$

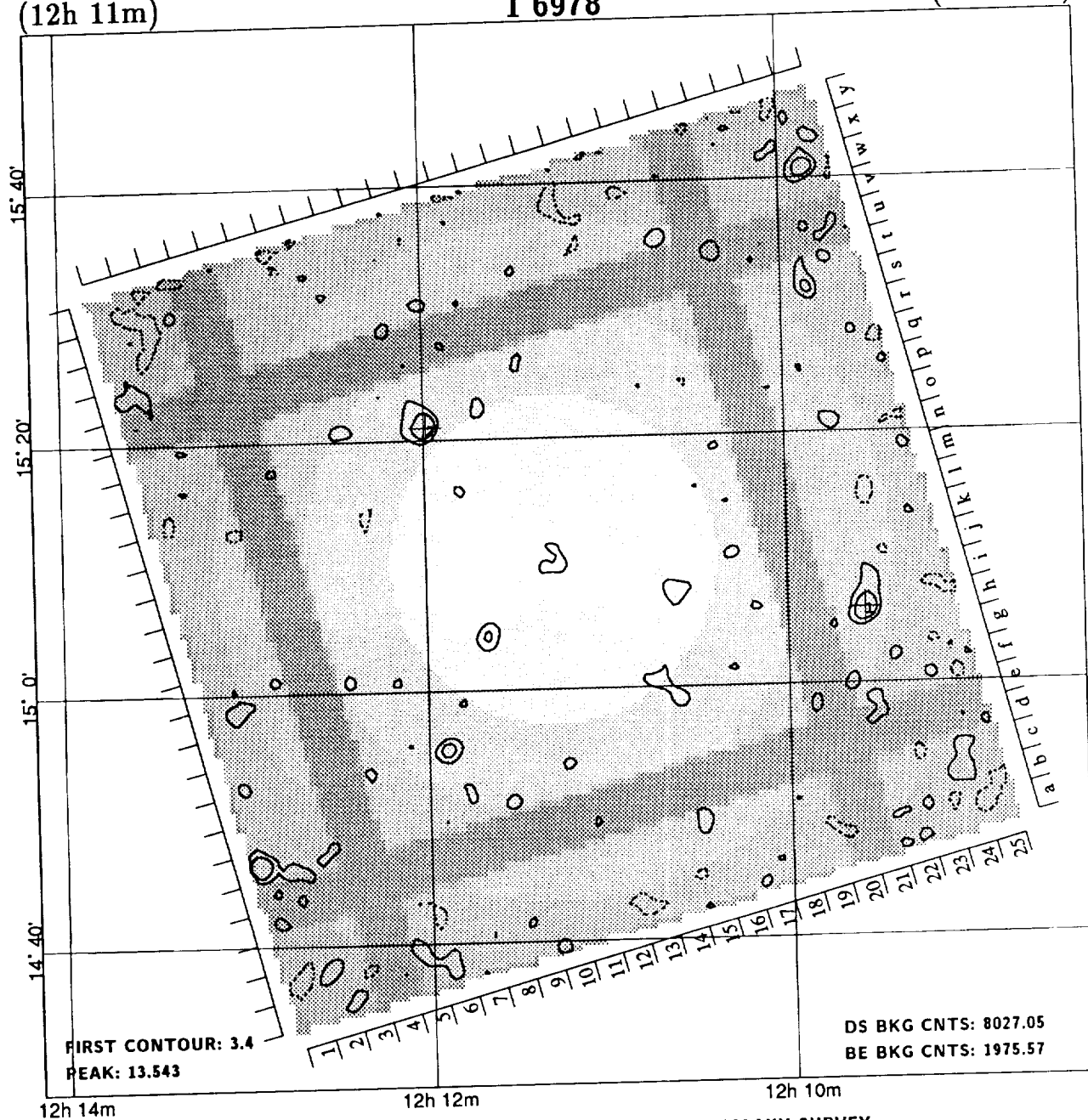
NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2615	1	12 10 23.4	10 45 26	61	*0.0106	0.0026	21.7	7.3	4.0	0.9	906	23.5	FLG H

(12h 11m)

I 6978

(12h 11m)



## NGC 4192/4192B/4186/4192A, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 11^m 15.6^s$   $15^\circ 10' 47''$  (B1950)  
 $12^h 13^m 48.3^s$   $14^\circ 54' 07''$  (J2000)  
 $l: 265.43$   $b: 74.96$

DATE: 1979/350 - 1979/350  
 LIVETIME: 6504.6s  
 ROLL ANGLE:  $-105.1^\circ$

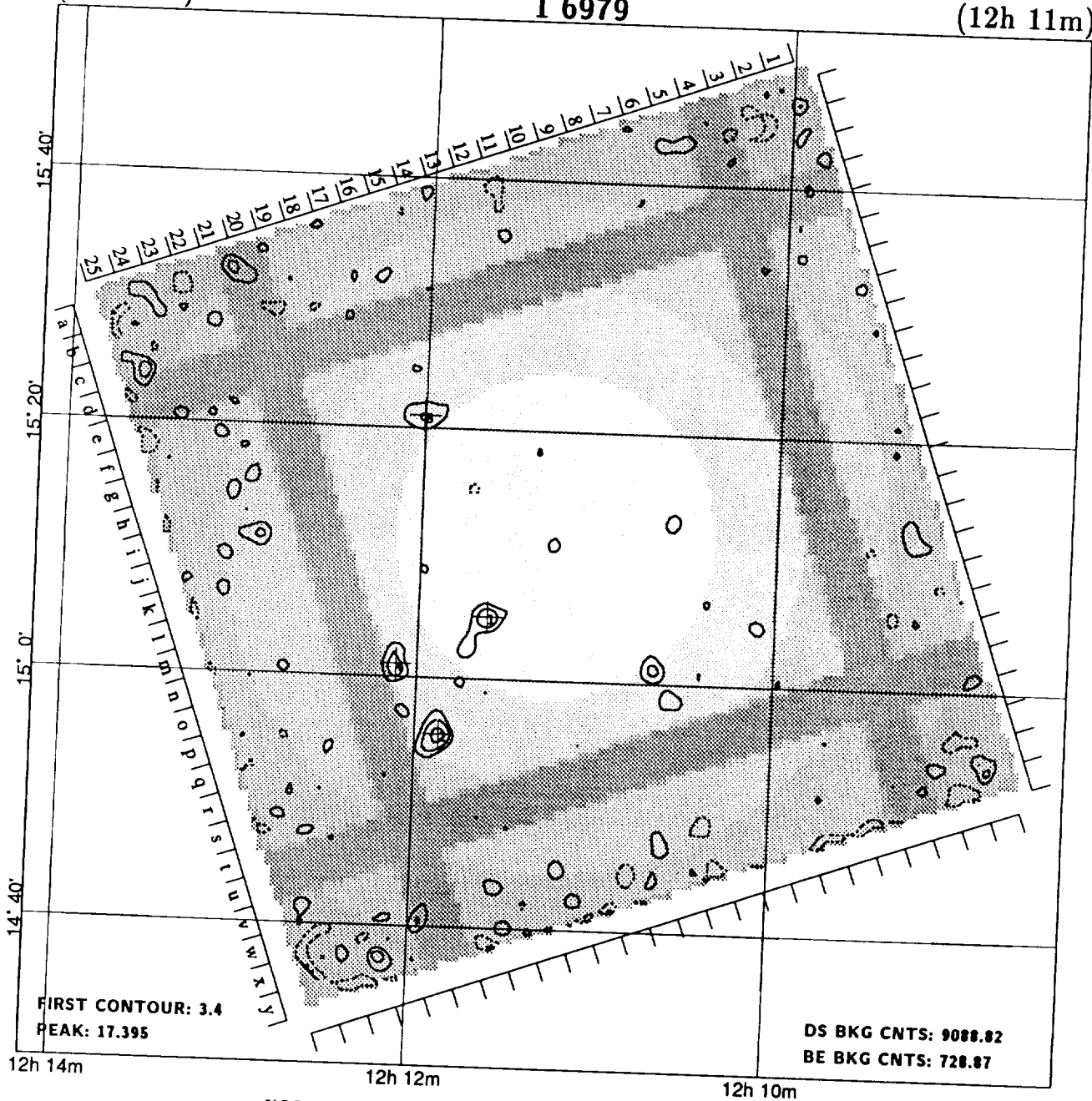
NH:  $2.7E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2614	1	12 09 34.4	15 05 59	55	0.0105	0.0024	29.4	16.6	4.3	1.0	0	24.3	H	
2624	2	12 11 59.2	15 20 59	42	0.0094	0.0020	36.4	21.6	4.8	0.9	0	14.7	AH	

(12h 11m)

I 6979

(12h 11m)



## NGC 4192/4192B/4186/4192A, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 11^m 15.6^s$   $15^\circ 10' 47''$  (B1950)  
 $12^h 13^m 48.3^s$   $14^\circ 54' 07''$  (J2000)  
 $l: 265.43$   $b: 74.96$

DATE: 1980/177 - 1980/177

NH:  $2.7E+20$ 

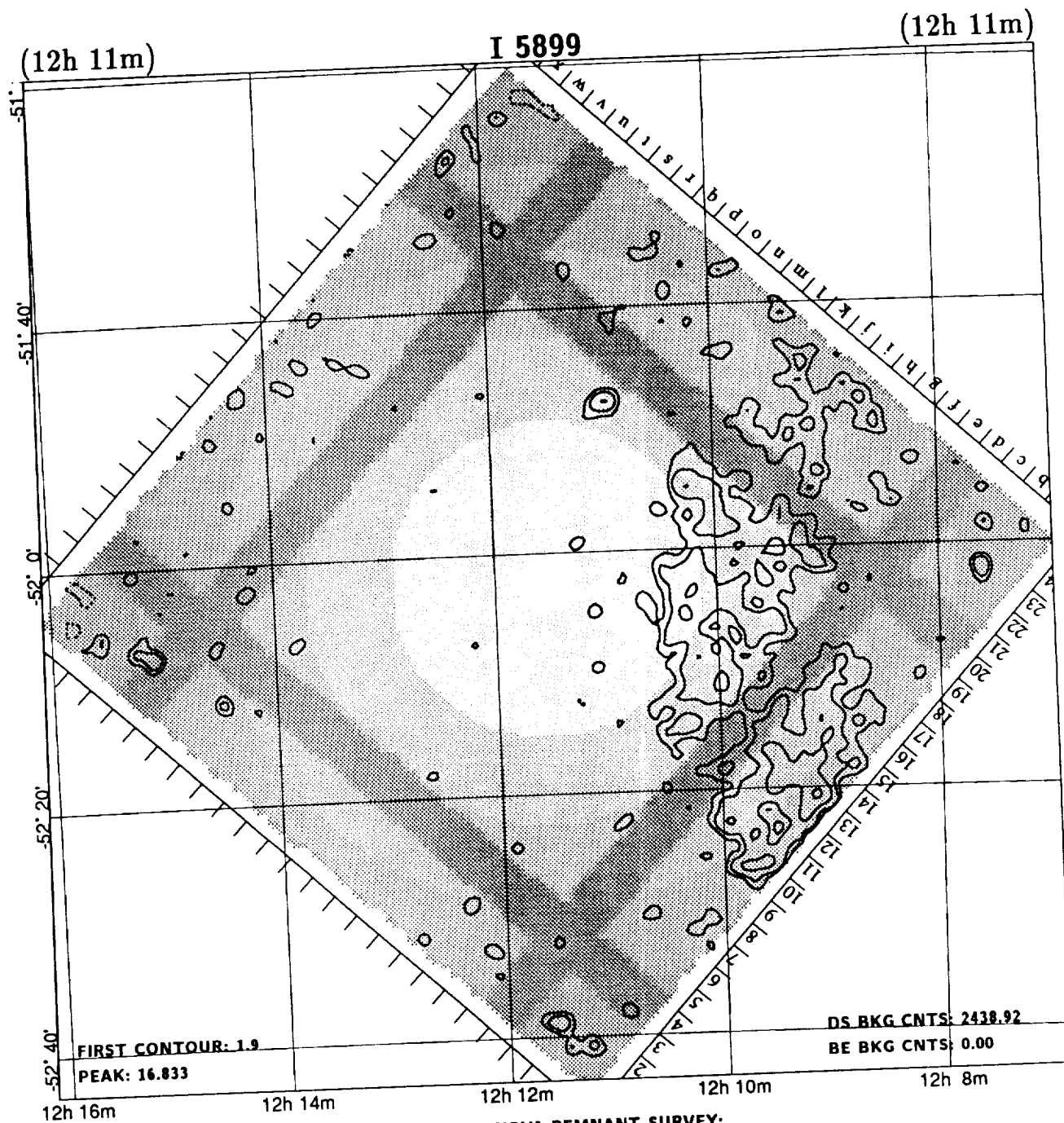
LIVETIME: 7365.0s

REF/ID:

ROLL ANGLE:  $70.9^\circ$ 

FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2619	1	12 11 36.8	15 04 55	42	0.0068	0.0015	33.8	23.2	4.5	1.0	0	7.9	H
2622	2	12 11 52.0	14 55 30	50	0.0110	0.0020	43.3	18.7	5.5	0.9	100	17.5	H
2624	3	12 12 00.4	15 20 59	47	0.0059	0.0016	25.8	21.2	3.8	1.1	0	14.1	AH
2625	4	12 12 07.1	15 01 02	55	*0.0059	0.0016	24.8	18.2	3.8	0.8	703	15.9	H

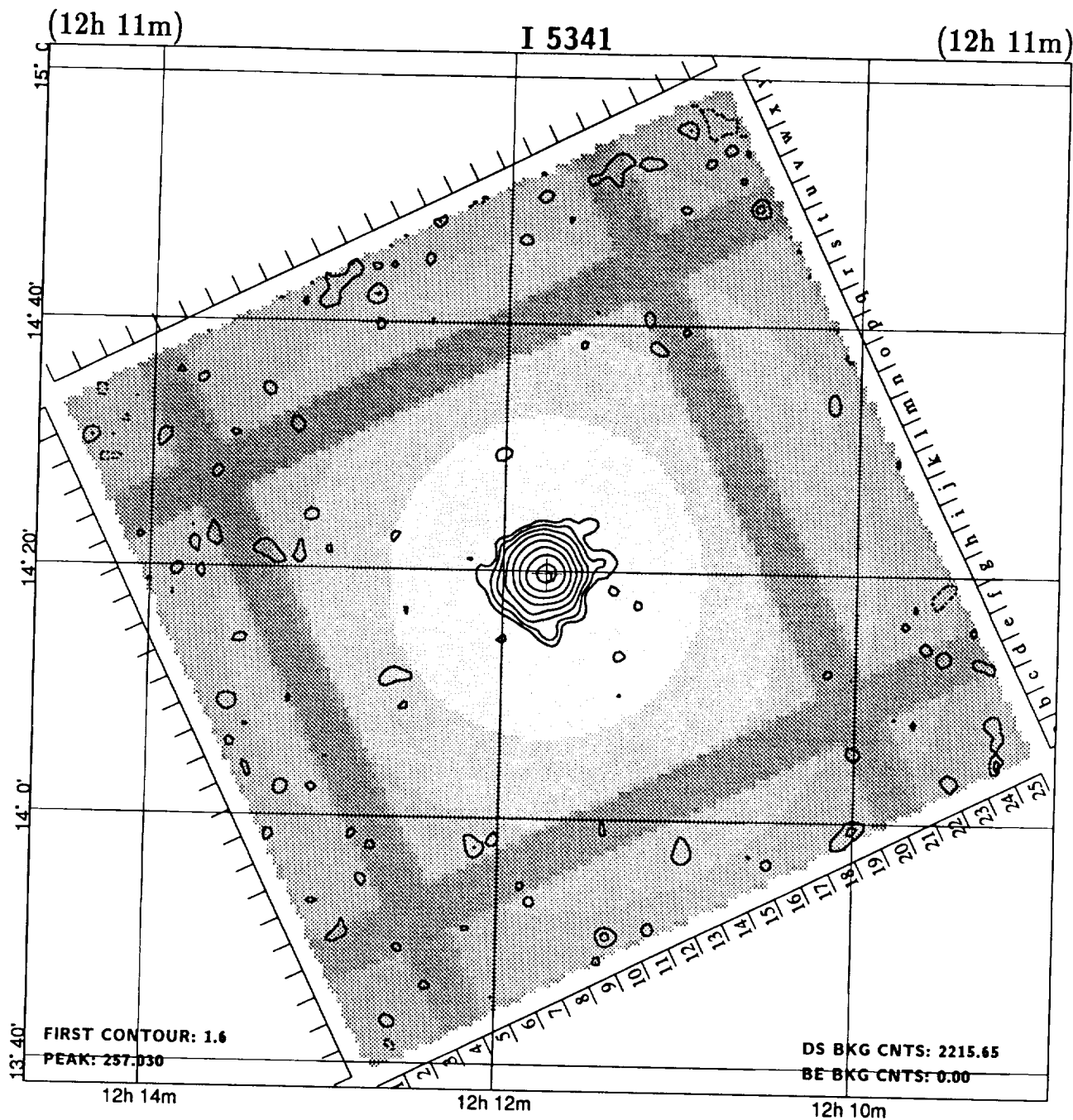


**SUPERNOVA REMNANT SURVEY:**

**FIELD CENTER:**  $12^h 11^m 31.2^s$   $-52^\circ 01' 35''$  (B1950)  
 $12^h 14^m 09.7^s$   $-52^\circ 18' 16''$  (J2000)  
 $l: 297.16$   $b: 10.15$

**DATE:** 1980/ 38 - 1980/ 38  
**LIVETIME:** 1976.3s  
**ROLL ANGLE:**  $-137.7^\circ$

**NH:**  $1.1E+21$   
**REF/ID:**  
**FIELD FLAGS:** LS



SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $12^h 11^m 45.4^s$   $14^\circ 19' 55''$  (B1950)  
 $12^h 14^m 18.2^s$   $14^\circ 03' 15''$  (J2000)  
 $l: 267.56$   $b: 74.32$

DATE: 1980/346 - 1980/346  
 LIVETIME: 1795.4s  
 ROLL ANGLE:  $-116.2^\circ$

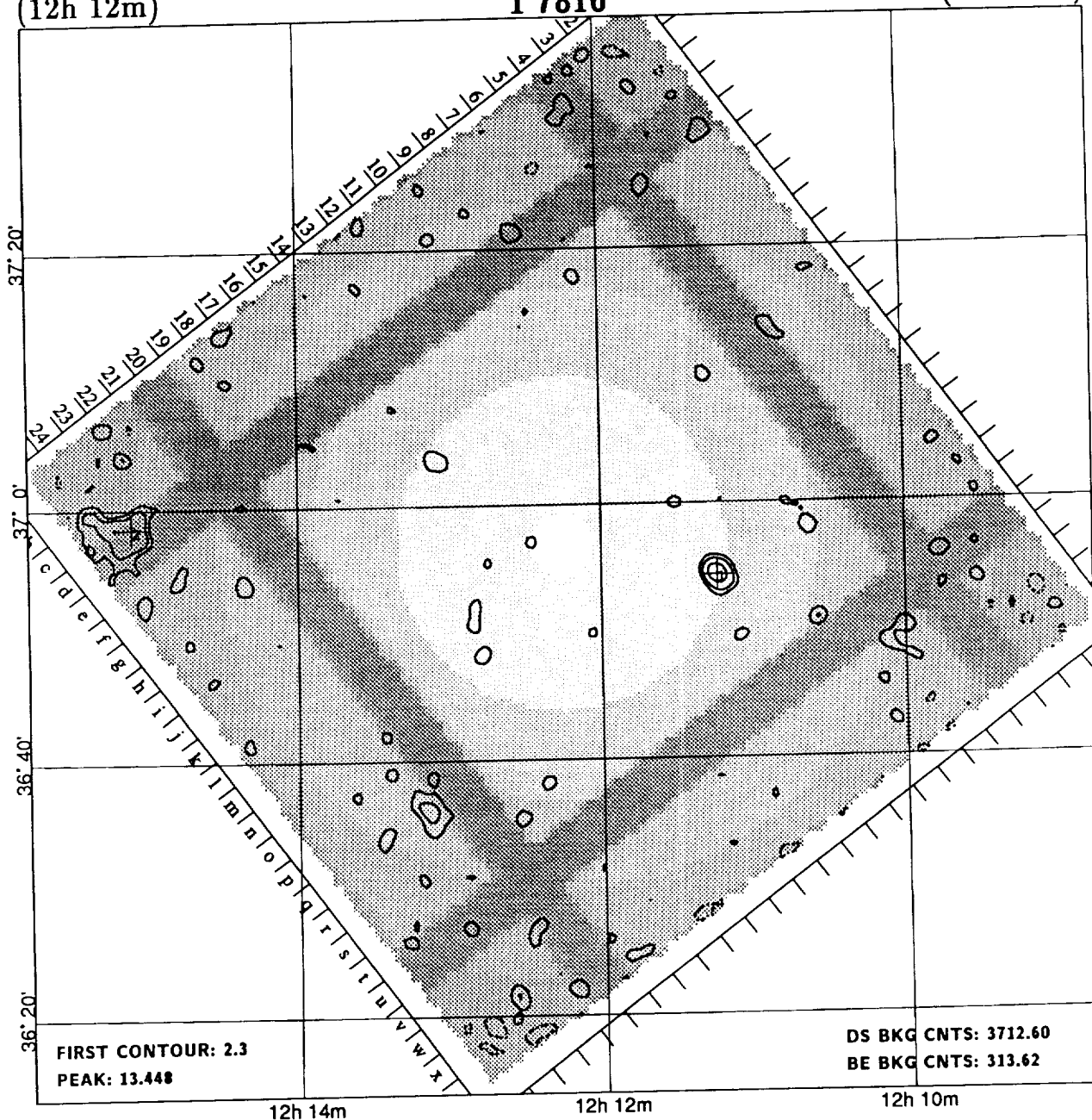
NH:  $2.7E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2620	1L	12 11 45.3	14 19 48	31	0.689	0.030	922.6	292.4	22.5	1.7	0	0.2	A	Q

(12h 12m)

I 7816

(12h 12m)



## HZ 22,X-RAY EMITTING EVOLVED ECLIPSING BINARIES

FIELD CENTER:  $12^h 12^m 16.0^s$   $36^\circ 55' 59''$  (B1950)  
 $12^h 14^m 46.8^s$   $36^\circ 39' 19''$  (J2000)  
 $l: 159.83$   $b: 77.71$

DATE: 1980/144 - 1980/144  
 LIVETIME: 3008.5s  
 ROLL ANGLE:  $53.3^\circ$

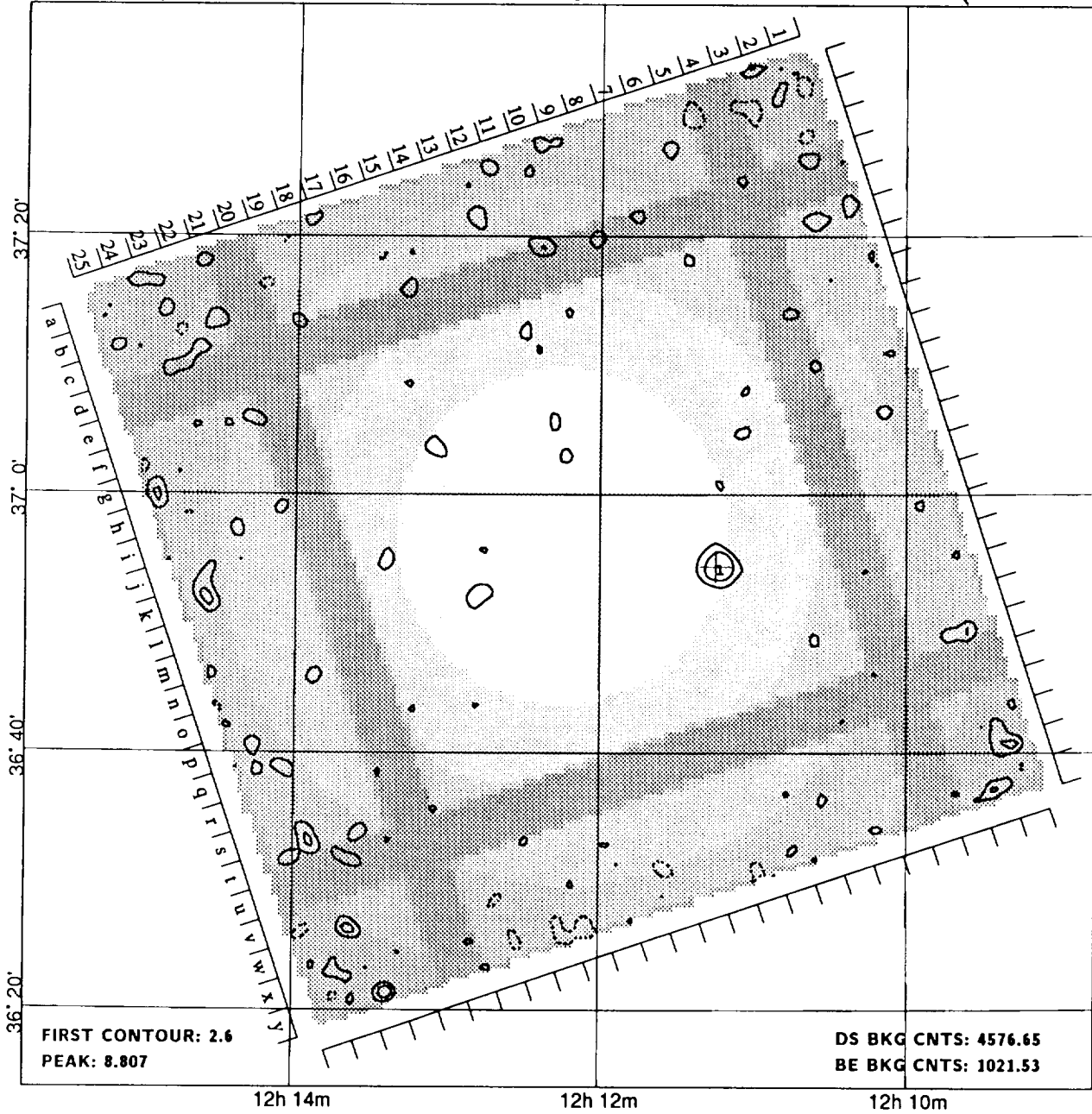
NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2617	1	12 11 14.1	36 54 24	41	0.0220	0.0038	41.9	9.1	5.9	0.9	0	12.2	A	
2640	2	12 15 05.4	36 58 28	68	*0.0201	0.0054	17.4	4.6	3.7	2.3	1209	33.3	H	

(12h 12m)

I 7817

(12h 12m)



HZ 22,X-RAY EMITTING EVOLVED ECLIPSING BINARIES

FIELD CENTER:  $12^h 12^m 16.0^s$   $36^\circ 55' 59''$  (B1950)  
 $12^h 14^m 46.8^s$   $36^\circ 39' 19''$  (J2000)  
 $l: 159.83$   $b: 77.71$

DATE: 1980/177 - 1980/177  
LIVETIME: 3708.6s  
ROLL ANGLE:  $71.5^\circ$

NH:  $1.7E+20$   
REF/ID:  
FIELD FLAGS: C

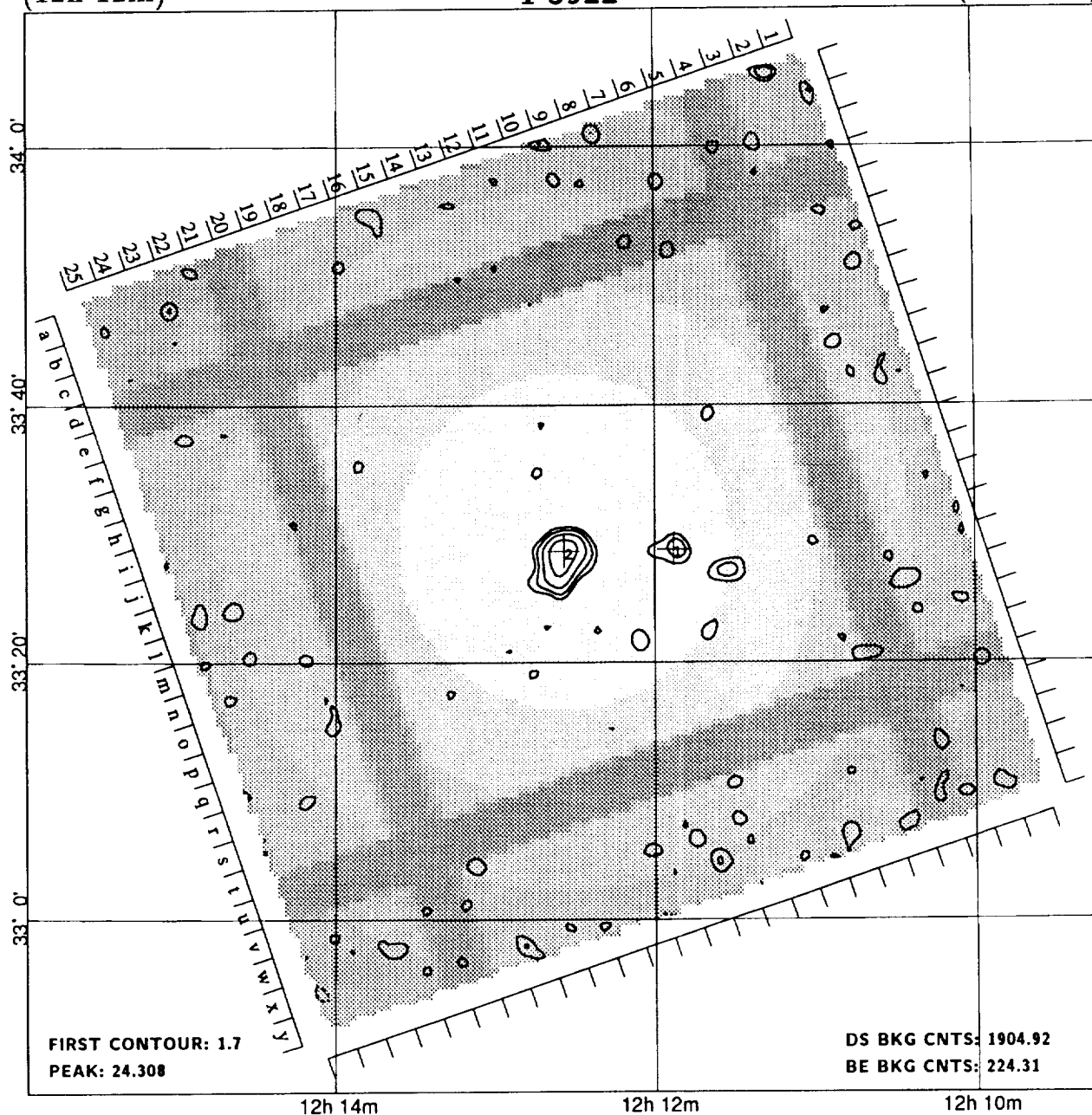
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2617	1	12 11 14.5	36 54 28	42	0.0144	0.0028	34.1	10.9	5.1	1.0	0	12.2	A	



(12h 12m)

I 3922

(12h 12m)



## NGC 4203 HALO

FIELD CENTER:  $12^h 12^m 34.2^s$   $33^\circ 28' 41''$  (B1950)  
 $12^h 15^m 05.3^s$   $33^\circ 12' 01''$  (J2000)  
 $l: 173.01$   $b: 80.08$

DATE: 1980/178 - 1980/178  
 LIVETIME: 1543.6s  
 ROLL ANGLE:  $71.4^\circ$

NH:  $1.2E+20$   
 REF/ID:  
 FIELD FLAGS:

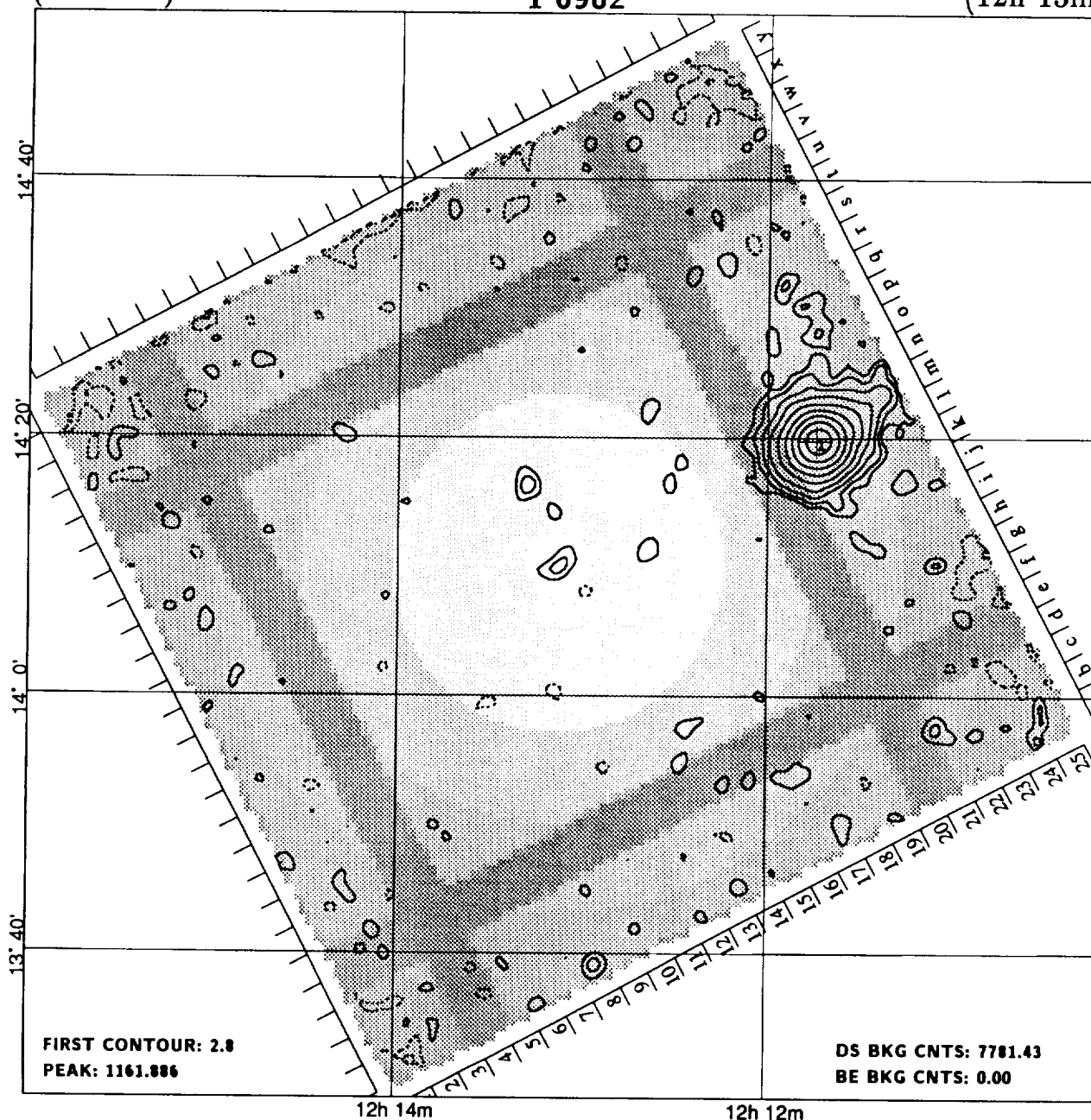
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2623	1	12 11 53.0	33 28 47	45	0.0161	0.0045	17.0	5.0	3.6	0.8	0	8.4	H	
2626	2	12 12 34.3	33 28 38	31	0.0912	0.0091	104.8	5.2	10.0	1.5	0	0.2	H	G



(12h 13m)

I 6982

(12h 13m)



## NGC 4212, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 13^m 06.6^s$   $14^\circ 10' 47''$  (B1950)  
 $12^h 15^m 39.3^s$   $13^\circ 54' 07''$  (J2000)  
 $\ell$ : 268.89  $b$ : 74.36

DATE: 1979/339 - 1979/339  
 LIVETIME: 6305.6s  
 ROLL ANGLE:  $-117.9^\circ$

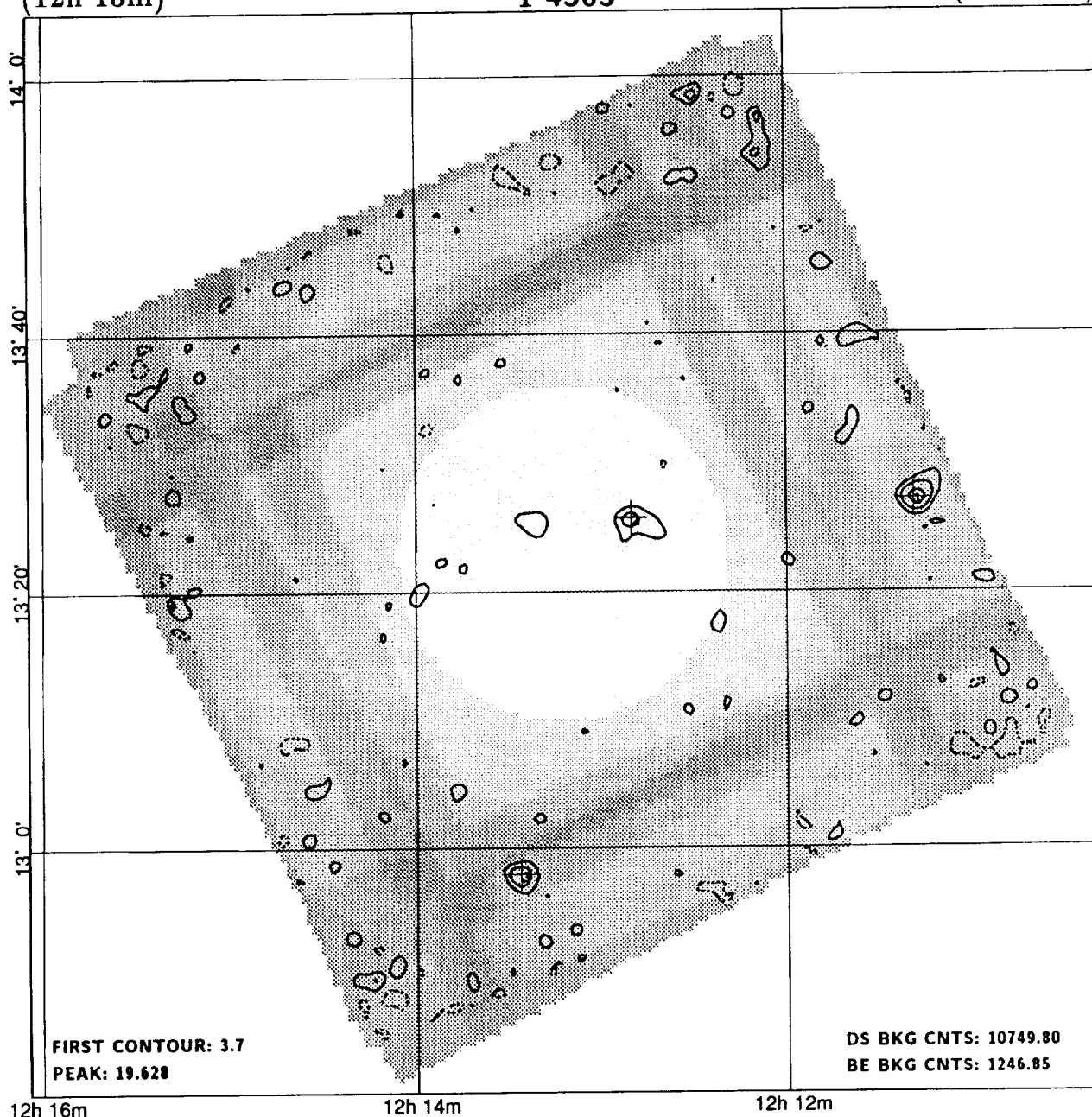
NH:  $2.8E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2620	1L	12 11 44.3	14 19 44	47	0.906	0.022	2700.9	569.1	40.8	1.6	100	21.8	A	Q

(12h 13m)

I 4303

(12h 13m)



12h 16m

12h 14m

12h 12m

VIRGO CLUSTER FOLLOW-UP: NGC 4216 4206

FIELD CENTER: 12<sup>h</sup>13<sup>m</sup>12.0<sup>s</sup> 13°22'59" (B1950)12<sup>h</sup>15<sup>m</sup>44.7<sup>s</sup> 13°06'19" (J2000)

l: 270.41 b: 73.68

DATE: 1979/340 - 1980/177

LIVETIME: 8710.9s

NH: 2.8E+20

REF/ID:

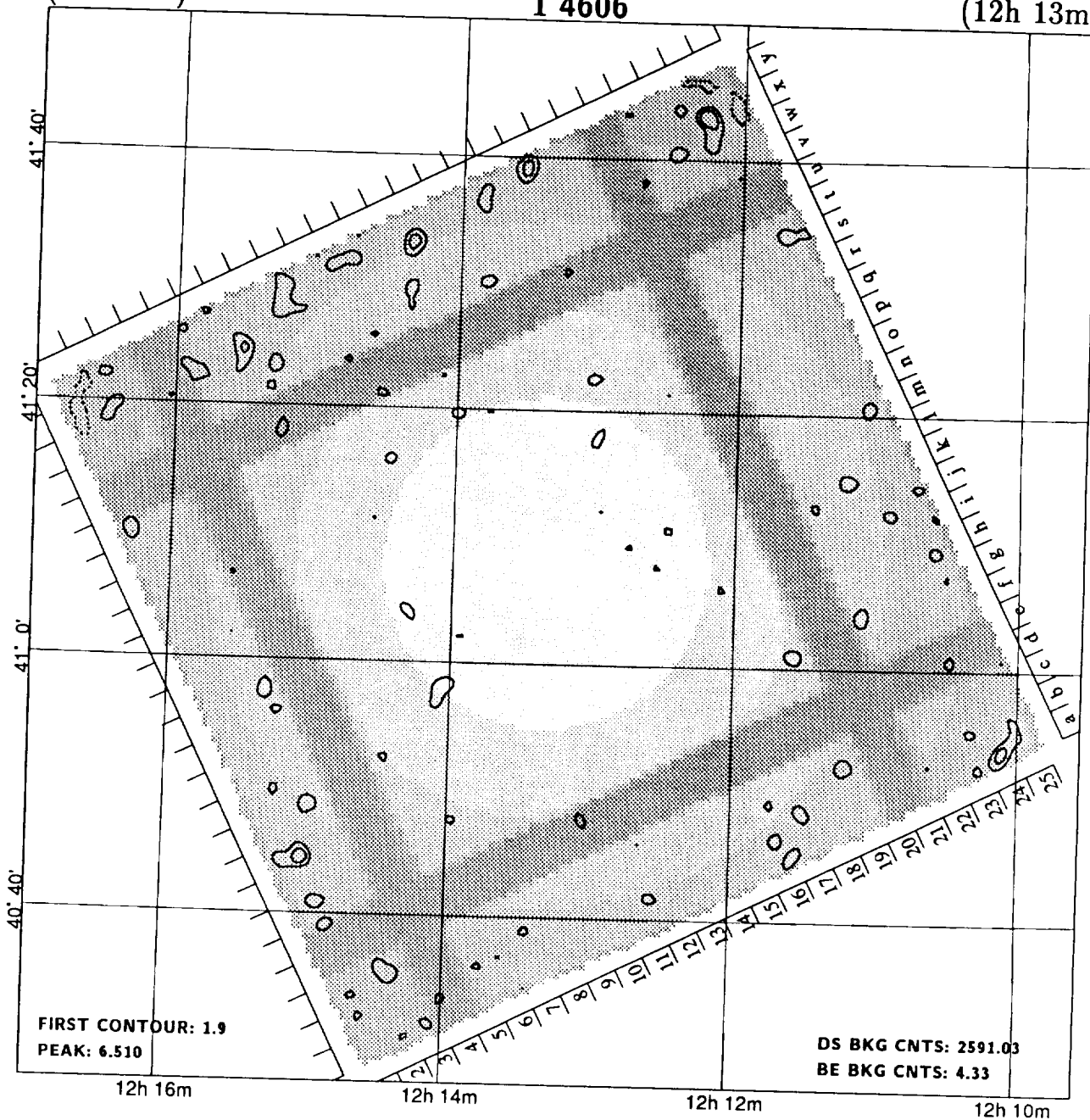
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2618	1	12 11 19.0	13 27 08	51	0.0099	0.0021	33.4	18.6	4.6	0.9	0	27.9	H	
2627	2	12 12 50.2	13 25 42	42	0.0054	0.0013	33.2	29.8	4.2	1.0	0	5.8	H	
2632	3	12 13 26.5	12 57 55	56	*0.0067	0.0017	24.8	14.2	4.0	0.7	1609	25.2	H	

(12h 13m)

I 4606

(12h 13m)



FIELD CENTER:  $12^h 13^m 15.8^s$   $41^\circ 08' 45''$  (B1950)  
 $12^h 15^m 45.9^s$   $40^\circ 52' 05''$  (J2000)  
 $l: 148.81$   $b: 74.42$

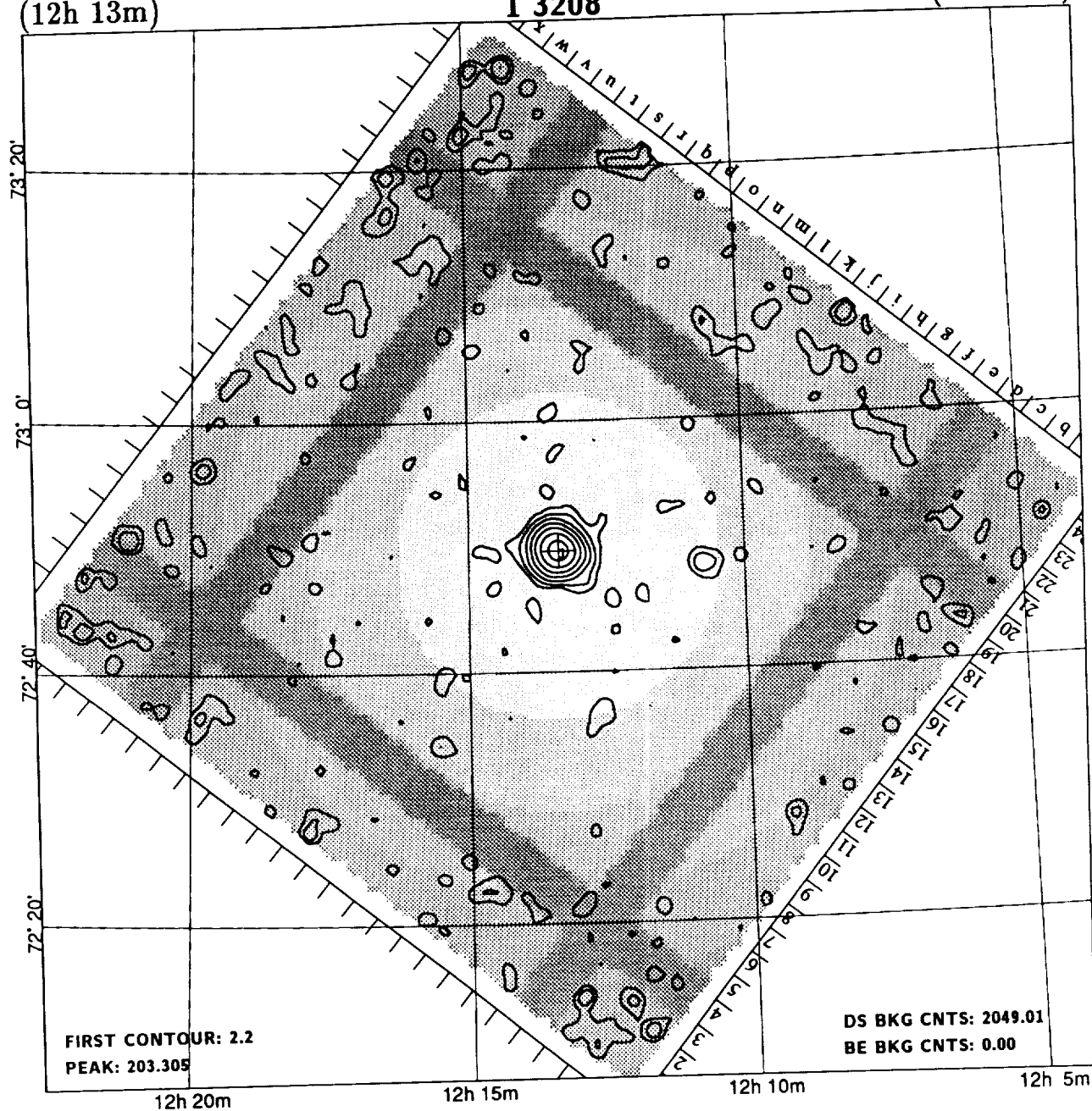
DATE: 1979/346 - 1979/346  
LIVETIME: 2099.6s  
ROLL ANGLE:  $-116.4^\circ$

NH:  $1.8E+20$   
REF/ID:  
FIELD FLAGS:

(12h 13m)

I 3208

(12h 13m)



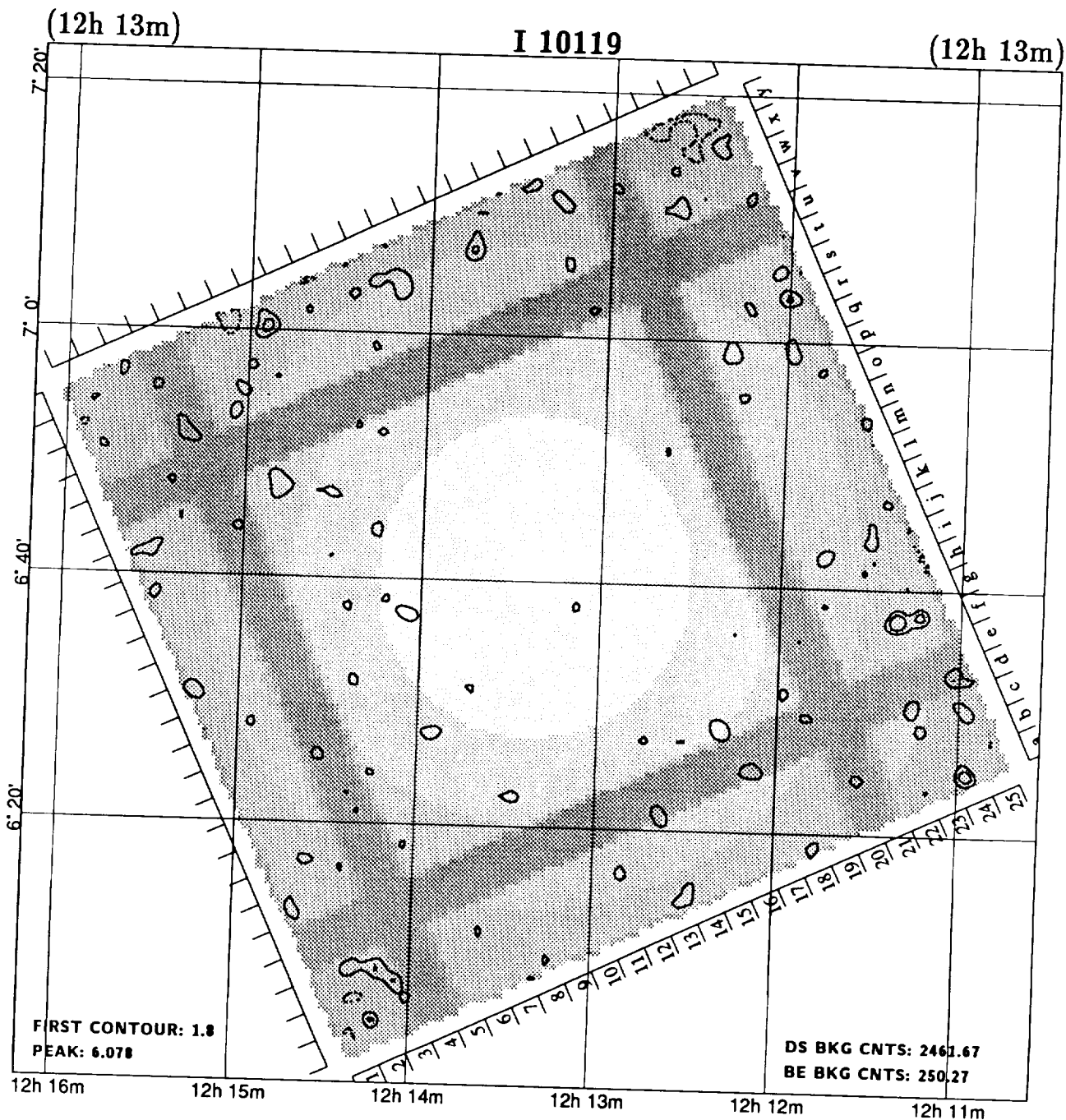
RS CVN SYSTEMS: HR 4665

FIELD CENTER:  $12^h 13^m 21.4^s$   $72^\circ 49' 44''$  (B1950)  
 $12^h 15^m 41.5^s$   $72^\circ 33' 04''$  (J2000)  
 $l: 126.66$   $b: 44.32$

DATE: 1979/316 - 1979/316  
 LIVETIME: 1660.4s  
 ROLL ANGLE:  $-141.6^\circ$

NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2631	1L	12 13 22.1	72 49 42	31	0.606	0.027	749.6	90.4	22.7	1.2	0	0.1		CV



NGC 4215, ACTIVE S0 GALAXIES

FIELD CENTER:  $12^{\text{h}}13^{\text{m}}22.0^{\text{s}}$   $06^{\circ}40'47''$  (B1950)  
 $12^{\text{h}}15^{\text{m}}55.2^{\text{s}}$   $06^{\circ}24'07''$  (J2000)  
 $l$ : 279.17  $b$ : 67.62

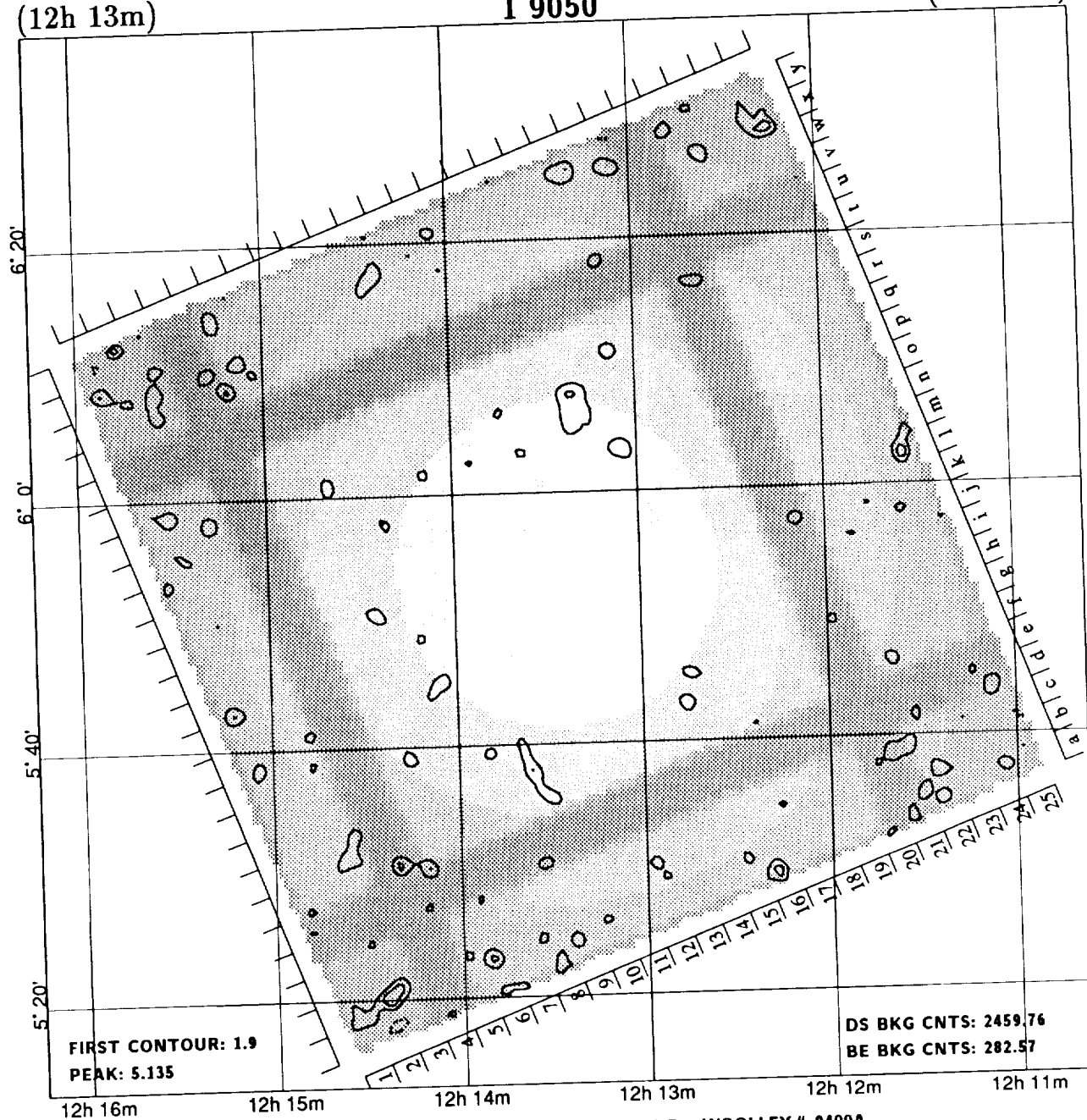
DATE: 1980/346 - 1980/346  
 LIVETIME: 1994.8s  
 ROLL ANGLE:  $-115.1^{\circ}$

NH:  $1.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 13m)

I 9050

(12h 13m)



FIELD CENTER:  $12^h 13^m 26.0^s$   $05^\circ 55' 05''$  (B1950)  
 $12^h 15^m 59.3^s$   $05^\circ 38' 25''$  (J2000)  
 $l: 279.91$   $b: 66.91$

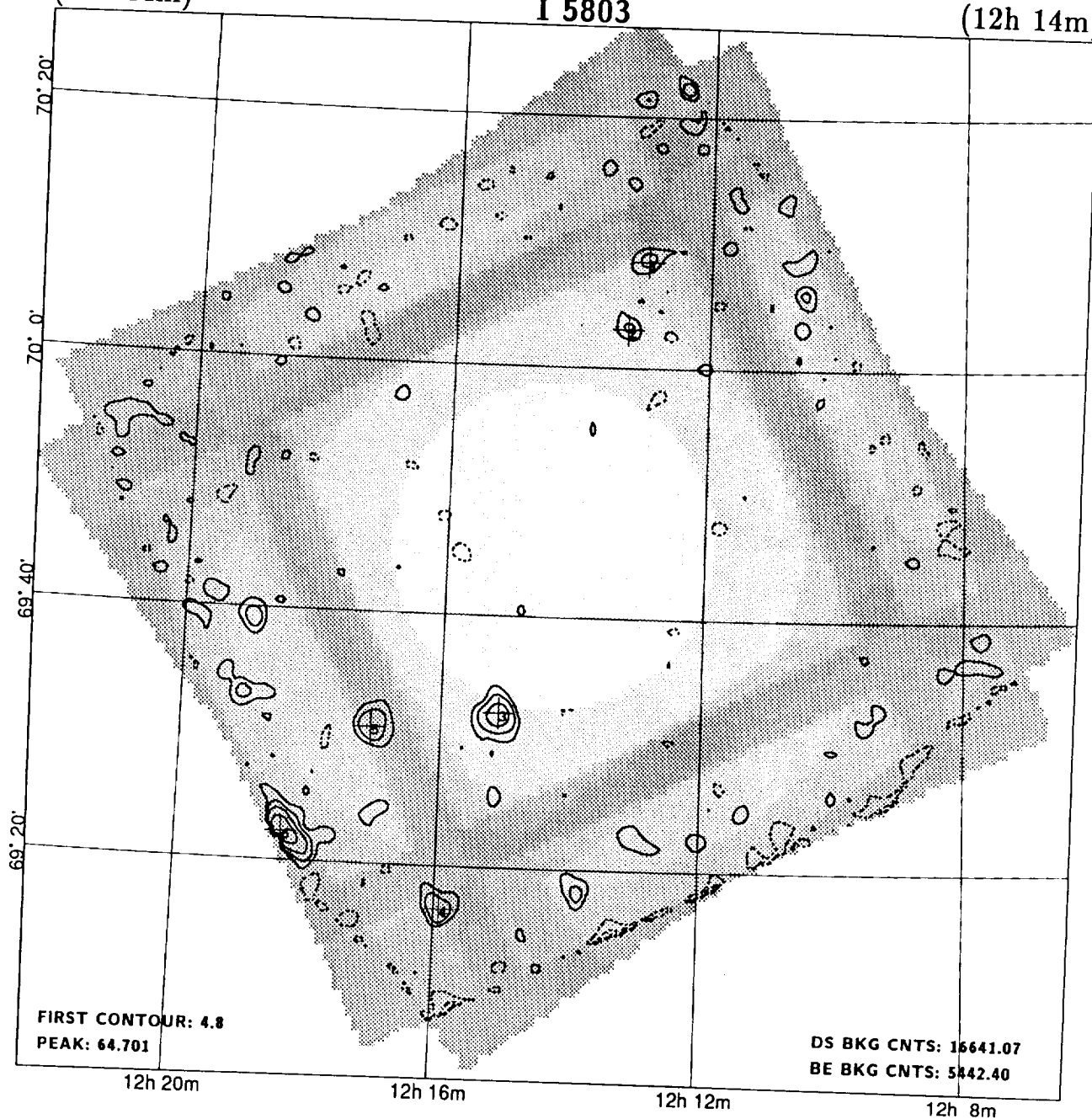
DATE: 1980/346 - 1980/346  
 LIVETIME: 1993.2s  
 ROLL ANGLE:  $-111.0^\circ$

NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 14m)

I 5803

(12h 14m)



NORMAL GALAXIES: N4236

FIELD CENTER:  $12^h 14^m 19.0^s$   $69^\circ 44' 59''$  (B1950)  
 $12^h 16^m 40.6^s$   $69^\circ 28' 19''$  (J2000)  
 $l: 127.42$   $b: 47.35$

DATE: 1980/145 - 1980/157  
 LIVETIME: 13484.8s

NH:  $1.8E+20$ 

REF/ID:

FIELD FLAGS:

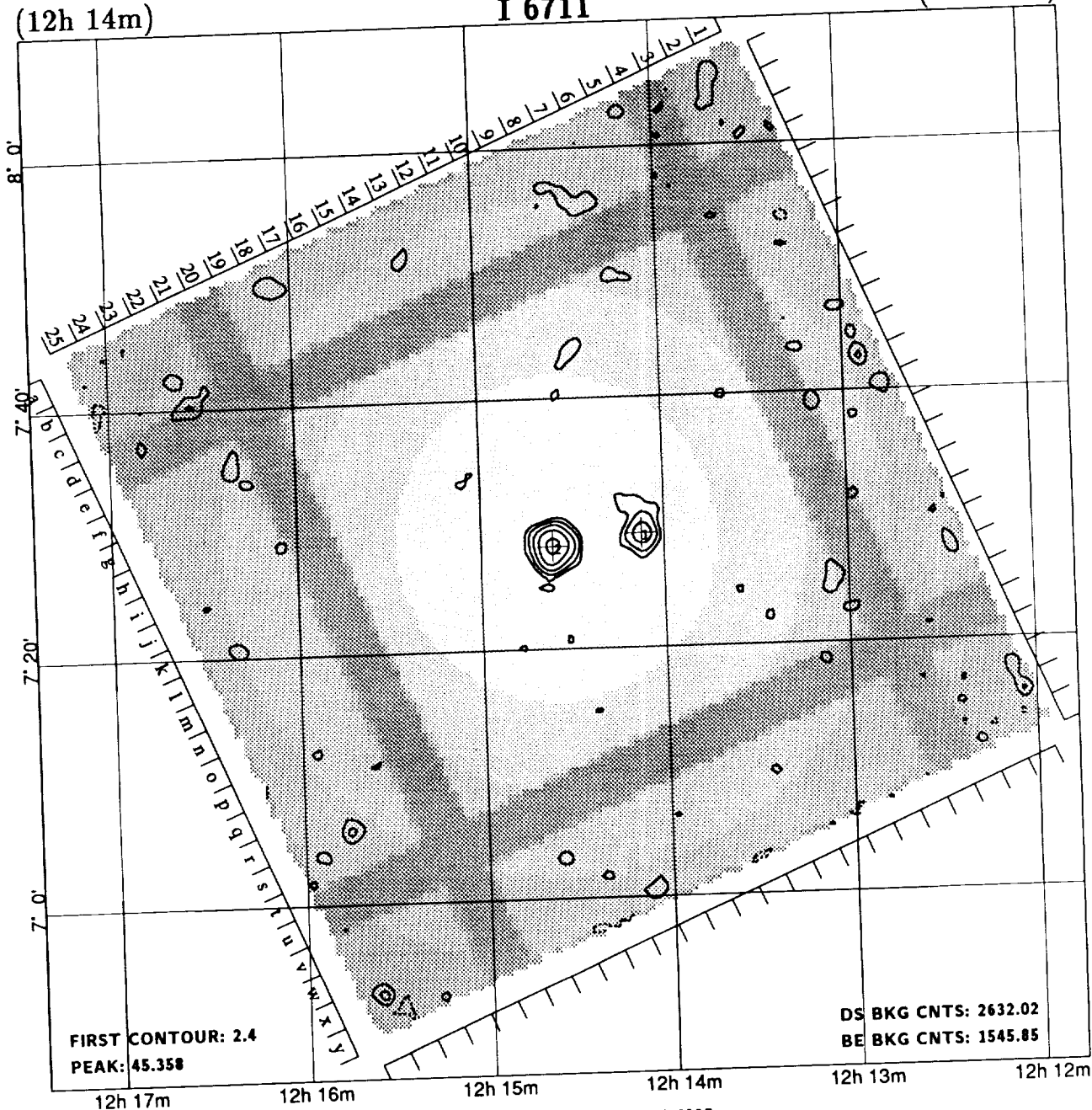
CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC	ID
2629	1	12 12 59.9	70 08 22	60	*0.0053	0.0013	32.2	30.8	4.1	0.7	802	24.2		
2630	2	12 13 17.6	70 02 59	55	0.0042	0.0012	30.9	41.1	3.6	0.6	0	19.0	H	
2641	3	12 15 06.8	69 32 17	38	0.0123	0.0015	101.2	49.8	8.2	1.1	0	13.2	H	S
2647	4	12 15 55.1	69 16 33	62	*0.0072	0.0016	33.8	22.2	4.5	0.9	1509	29.7		
2657	5	12 17 04.3	69 30 50	55	*0.0071	0.0013	48.1	23.9	5.7	1.0	1108	20.2		Q
2667	6	12 18 22.6	69 22 16	48	*0.0504	0.0048	127.9	22.1	10.4	1.7	1208	31.1	EH	



(12h 14m)

I 6711

(12h 14m)



FIELD CENTER:  $12^h 14^m 36.0^s$   $07^\circ 27' 59''$  (B1950)  
 $12^h 17^m 09.1^s$   $07^\circ 11' 20''$  (J2000)  
 $l: 279.18$   $b: 68.46$

DATE: 1980/176 - 1980/176  
 LIVETIME: 2132.8s  
 ROLL ANGLE:  $66.7^\circ$

NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS: L

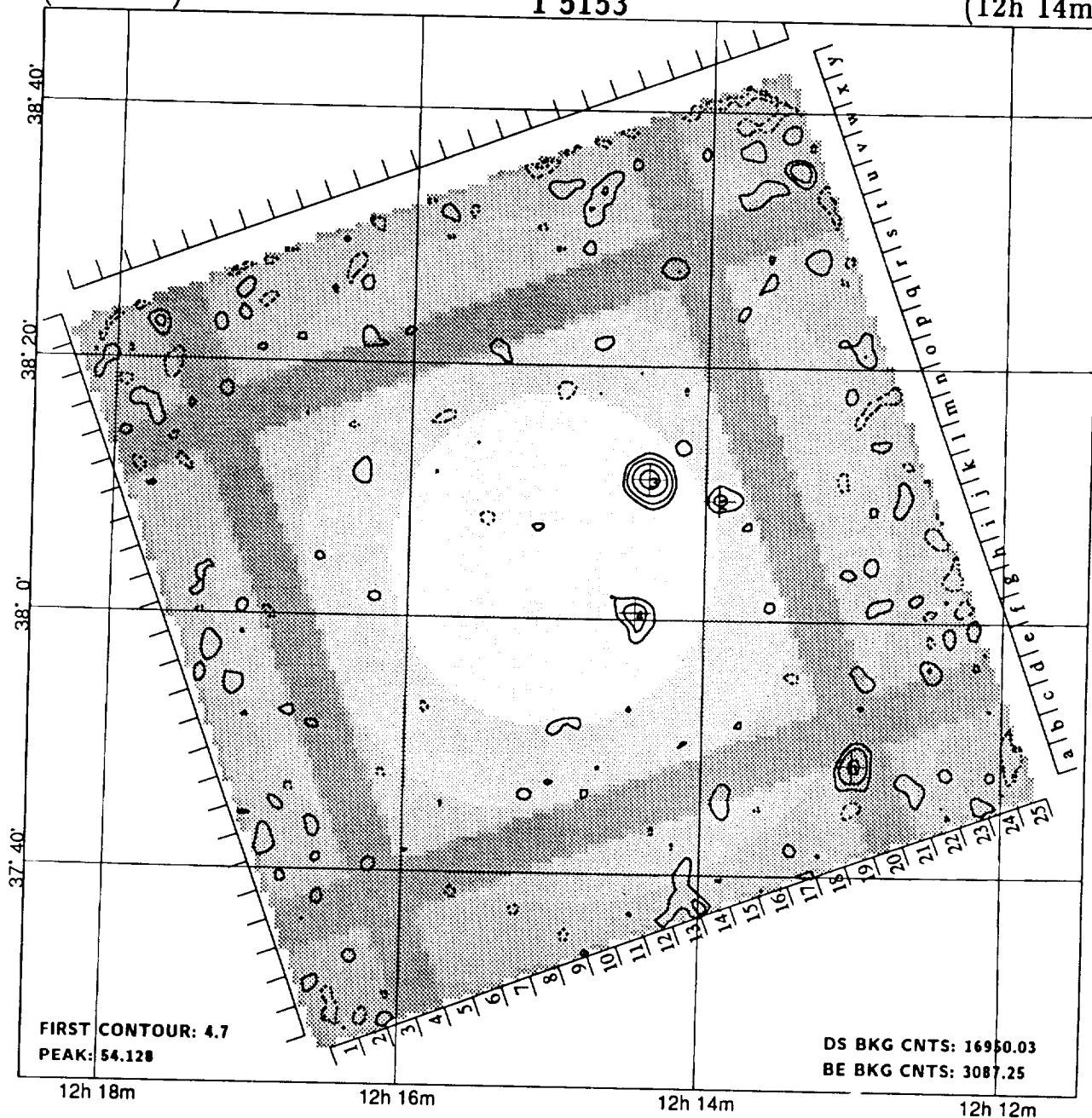
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2634	1L	12 14 07.4	07 29 08	41	0.0299	0.0062	44.5	17.5	4.7	1.1	0	7.2	
2637	2L	12 14 36.5	07 28 13	31	0.112	0.010	178.3	31.7	10.6	1.2	0	0.3	



(12h 14m)

I 5153

(12h 14m)



NGC 4244, GASEOUS HALOES OF GALAXIES

FIELD CENTER:  $12^h 14^m 59.0^s$   $38^\circ 05' 11''$  (B1950)  
 $12^h 17^m 29.0^s$   $37^\circ 48' 32''$  (J2000)  
 $l: 154.57$   $b: 77.15$

DATE: 1979/346 - 1979/348

LIVETIME: 13735.1s

ROLL ANGLE:  $-110.2^\circ$ NH:  $1.9E+20$ 

REF/ID:

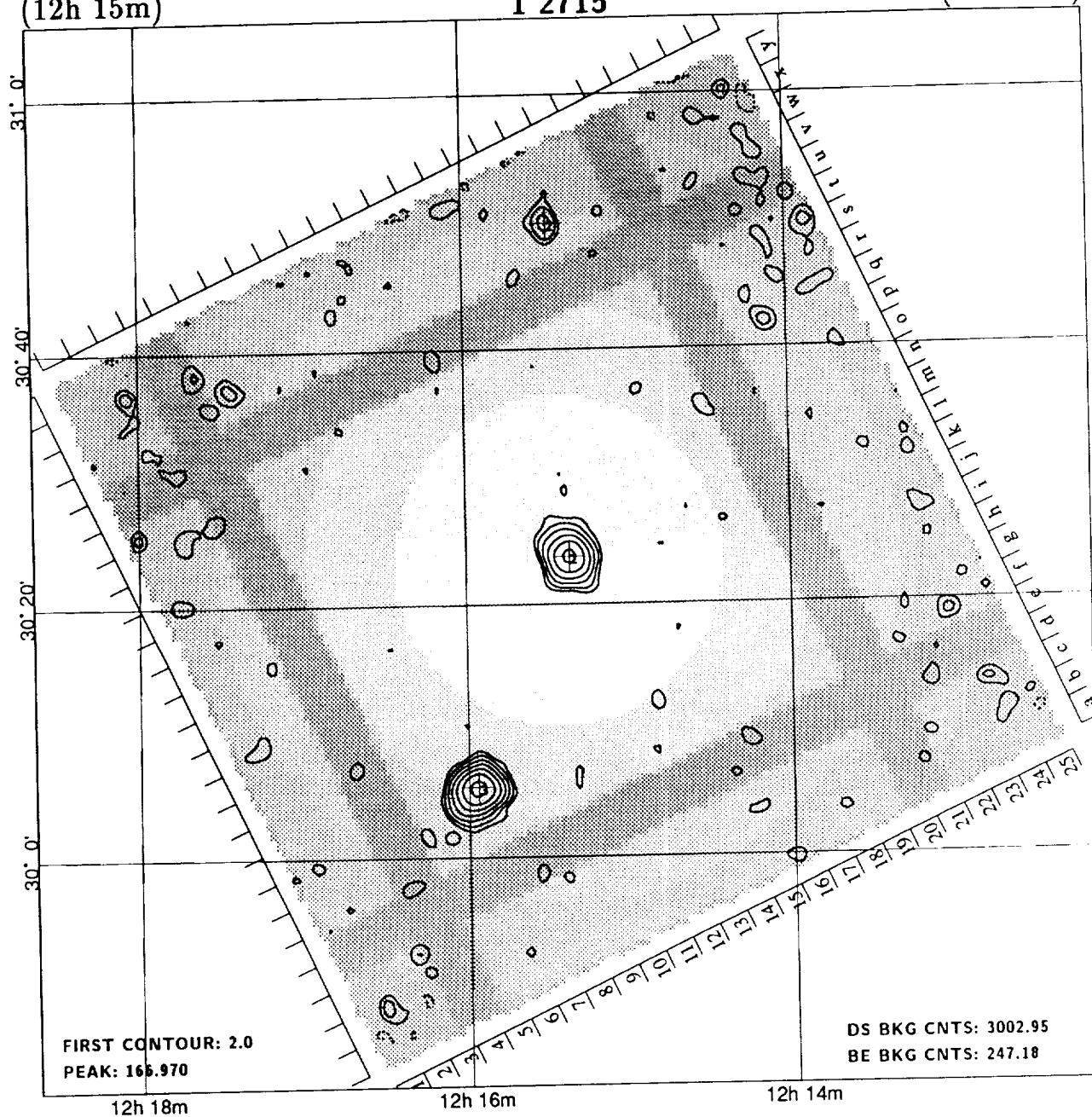
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2628	1	12 12 59.6	37 48 52	55	*0.0089	0.0016	45.4	19.6	5.6	1.0	1308	28.4		*
2633	2	12 13 54.6	38 09 29	45	0.0043	0.0010	35.5	39.5	4.1	0.7	100	13.7	H	
2635	3	12 14 23.0	38 11 08	38	0.0210	0.0017	192.2	44.8	12.5	1.1	0	9.2	H	BL
2636	4	12 14 27.8	38 00 32	41	0.0062	0.0011	58.8	51.2	5.6	0.9	0	7.8	H	*

(12h 15m)

I 2715

(12h 15m)



QUASAR SURVEY: ON 325

FIELD CENTER:  $12^h 15^m 24.0^s$   $30^\circ 23' 59''$  (B1950)  
 $12^h 17^m 54.9^s$   $30^\circ 07' 20''$  (J2000)  
 $l: 188.81$   $b: 82.06$

DATE: 1979/350 - 1979/350  
 LIVETIME: 2433.4s  
 ROLL ANGLE:  $-115.2^\circ$

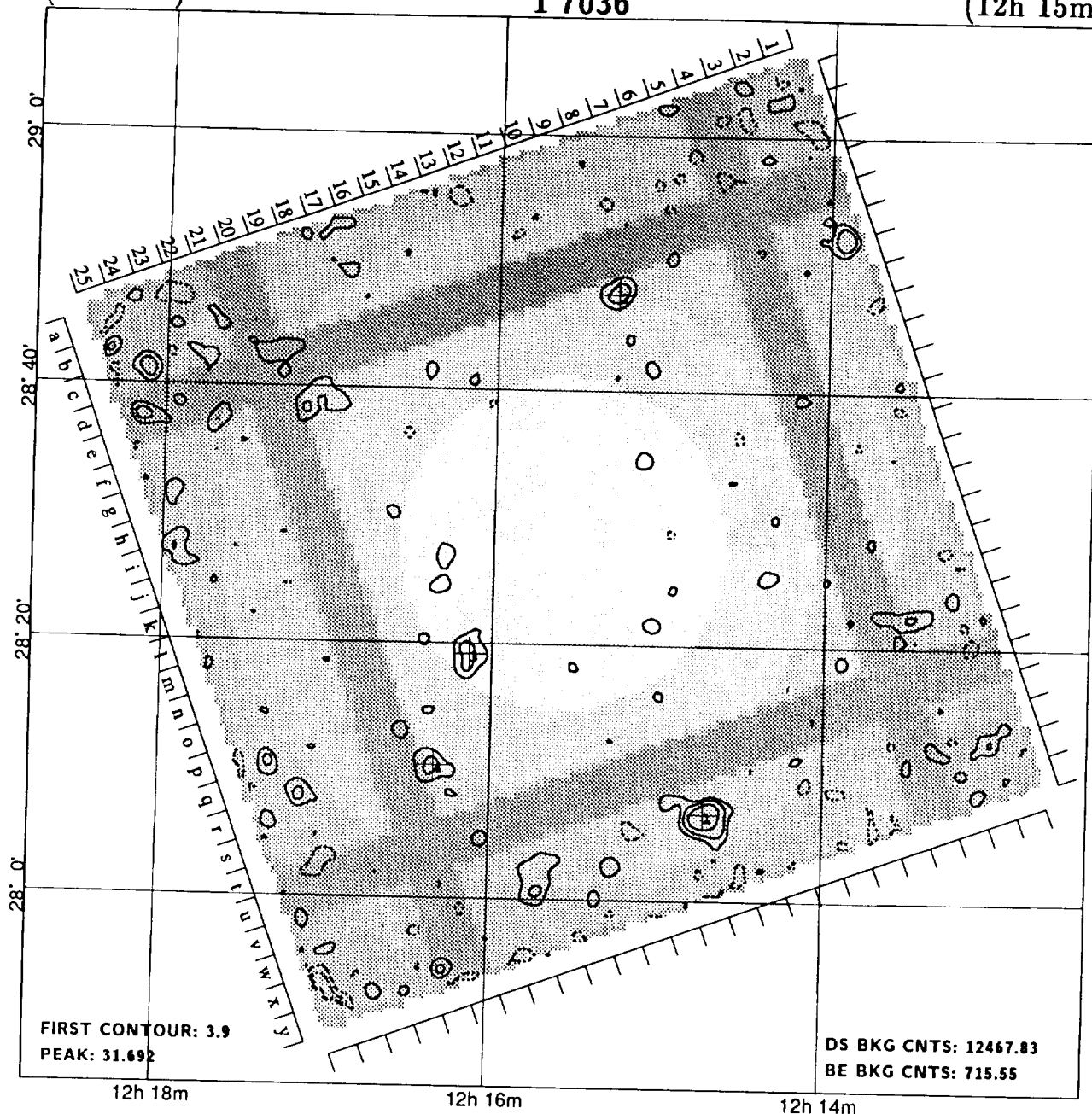
NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2644	1	12 15 21.7	30 23 40	31	0.1709	0.0099	309.4	8.6	17.3	1.2	0	0.6	AH	
2645	2	12 15 28.6	30 49 53	53	0.0184	0.0049	18.2	4.8	3.8	0.8	0	26.0	H	
2648	3	12 15 56.4	30 05 33	47	0.361	0.017	462.3	5.7	21.4	1.2	0	19.6	AH	SY

(12h 15m)

I 7036

(12h 15m)



## NGC 4251, EARLY GALAXY SURVEY

FIELD CENTER:  $12^h 15^m 36.0^s$   $28^\circ 27' 10''$  (B1950)  
 $12^h 18^m 07.1^s$   $28^\circ 10' 31''$  (J2000)  
 $\ell$ : 202.93  $b$ : 82.55

DATE: 1980/179 - 1980/179

NH:  $1.8E+20$ 

LIVETIME: 10103.0s

REF/ID: !

ROLL ANGLE:  $70.2^\circ$ 

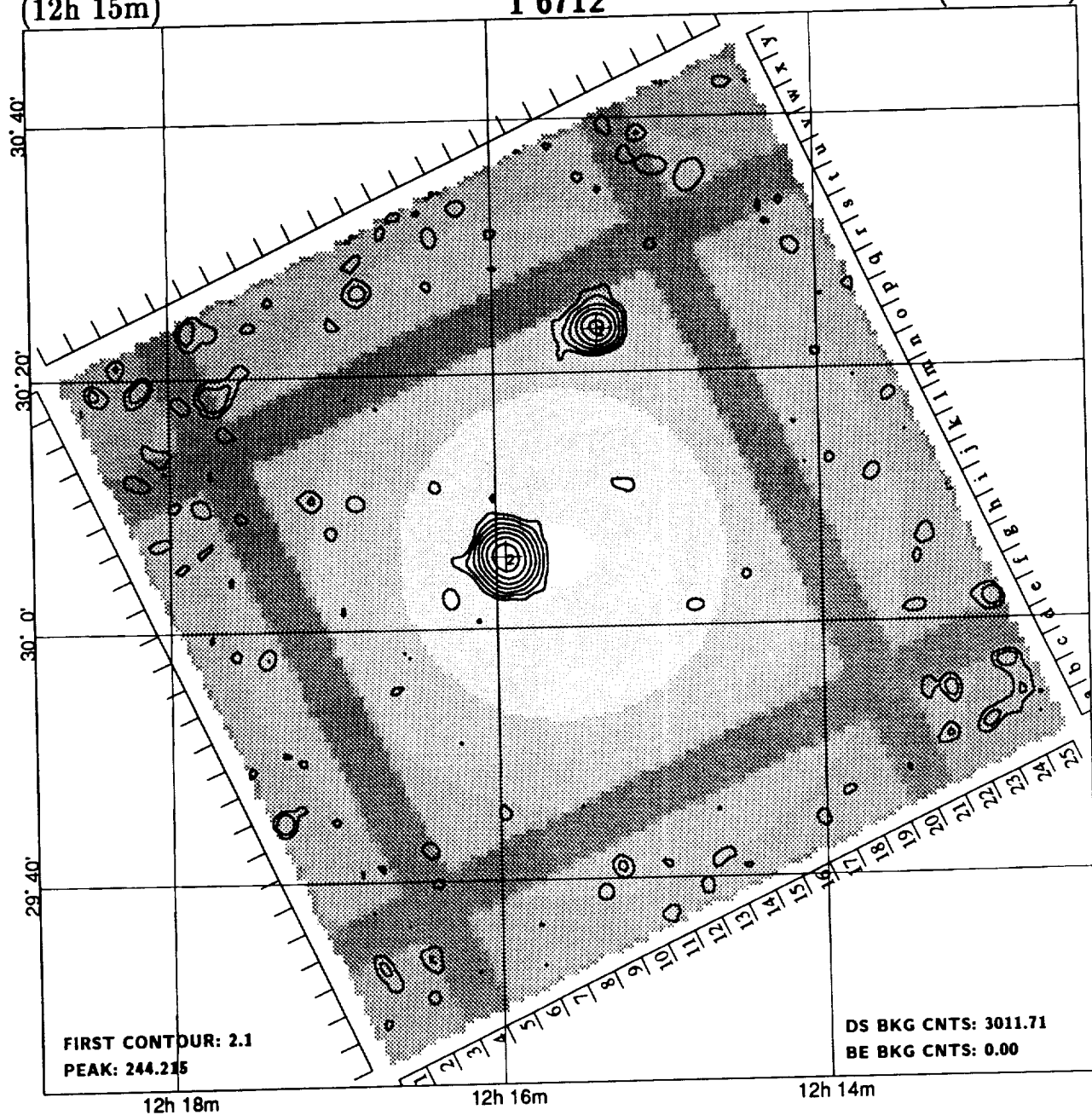
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2638	1	12 14 42.7	28 06 49	50	0.0183	0.0023	82.3	21.7	8.1	1.1	100	23.2	H	
2642	2	12 15 16.4	28 47 27	55	0.0064	0.0014	33.0	19.0	4.6	0.7	400	20.6	H	
2649	3	12 16 08.1	28 19 10	43	0.0062	0.0013	40.9	26.1	5.0	0.9	0	11.2	H	S
2651	4	12 16 20.5	28 10 26	57	*0.0053	0.0013	27.1	19.9	3.9	0.8	703	19.4	H	

(12h 15m)

I 6712

(12h 15m)



SEYFERT SURVEY: MKN 766

FIELD CENTER:  $12^h 15^m 36.0^s$   $30^\circ 05' 59''$  (B1950)  
 $12^h 18^m 06.9^s$   $29^\circ 49' 20''$  (J2000)  
 $l: 190.78$   $b: 82.20$

DATE: 1979/350 - 1979/350  
 LIVETIME: 2440.5s  
 ROLL ANGLE:  $-115.2^\circ$

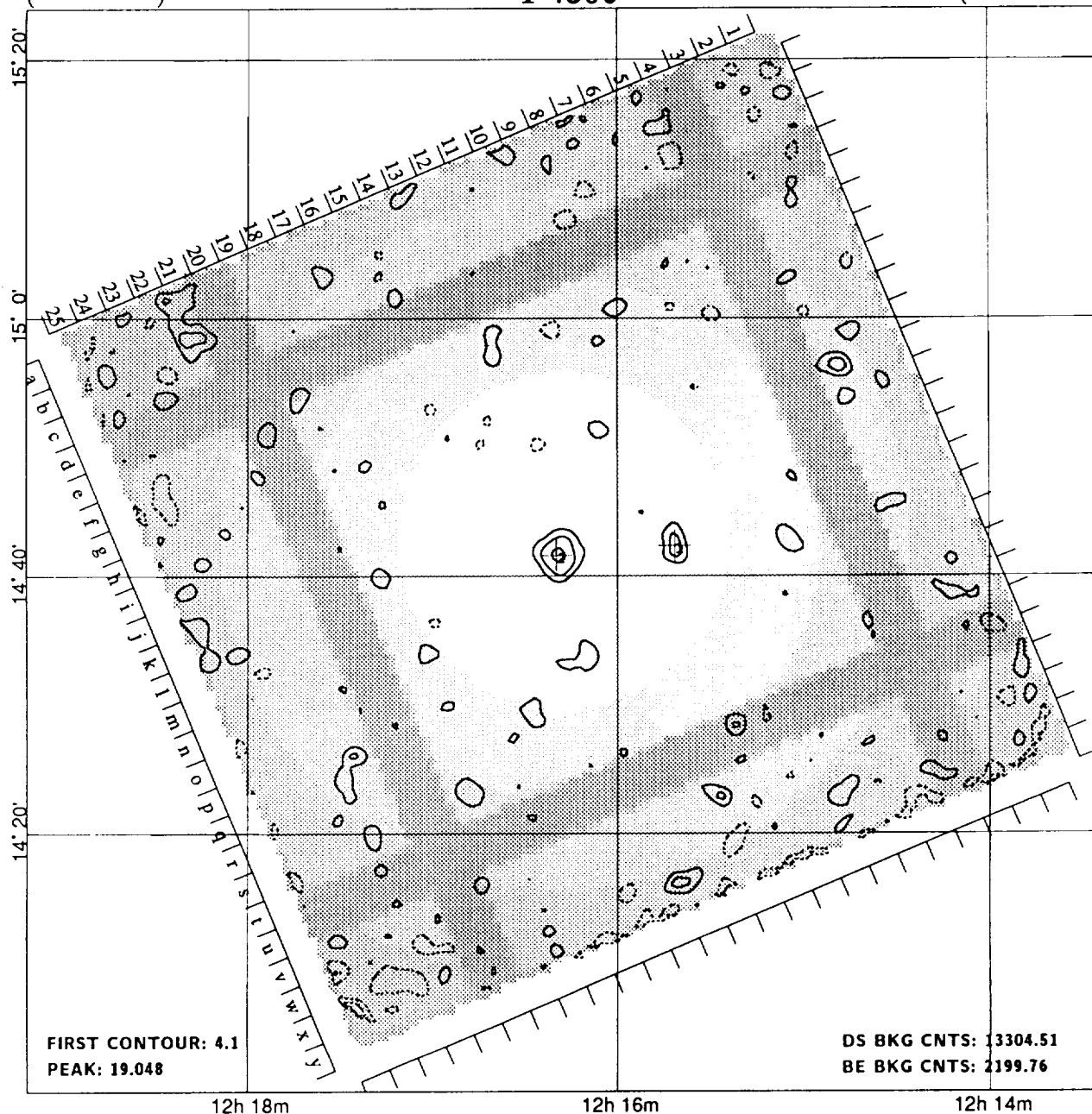
NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2644	1L	12 15 21.4	30 23 25	47	0.175	0.013	230.6	10.4	13.2	1.1	0	17.7	A	
2648	2L	12 15 56.5	30 05 35	31	0.537	0.021	939.5	114.5	25.4	1.3	0	4.5	A	SY

(12h 16m)

I 4306

(12h 16m)



## VIRGO CLUSTER FOLLOW-UP: NGC 4254

FIELD CENTER:  $12^h 16^m 18.0^s$   $14^\circ 41' 59''$  (B1950) $12^h 18^m 50.4^s$   $14^\circ 25' 20''$  (J2000) $l$ : 270.43  $b$ : 75.20

DATE: 1980/177 - 1980/177

LIVETIME: 10781.0s

ROLL ANGLE:  $67.3^\circ$ NH:  $2.8E+20$ 

REF/ID:

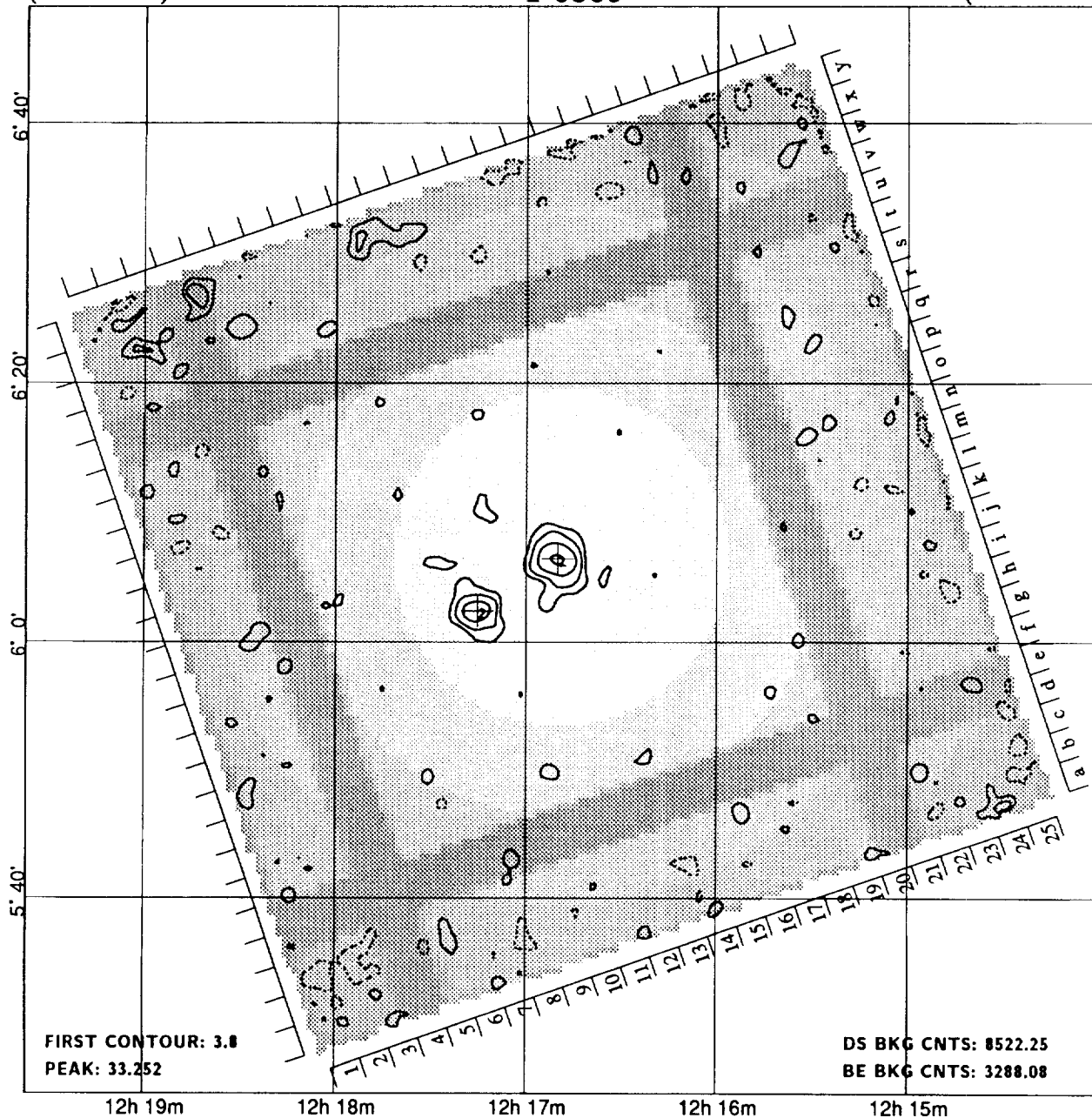
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2646	1	12 15 41.3	14 42 22	42	0.0059	0.0012	43.6	37.4	4.8	0.7	0	8.7	H	
2650	2	12 16 19.8	14 41 37	34	0.0100	0.0014	79.7	40.3	7.3	1.1	0	0.6	H	

(12h 16m)

I 6309

(12h 16m)



## 3C 270, RADIO GALAXIES W/ PROMINENT RADIO JETS

FIELD CENTER:  $12^h 16^m 48.0^s$   $06^\circ 06' 59''$  (B1950) $12^h 19^m 21.2^s$   $05^\circ 50' 20''$  (J2000) $l$ : 281.77  $b$ : 67.38

DATE: 1980/347 - 1980/347

LIVETIME: 6905.9s

ROLL ANGLE:  $-109.0^\circ$ NH:  $1.6E+20$ 

REF/ID:

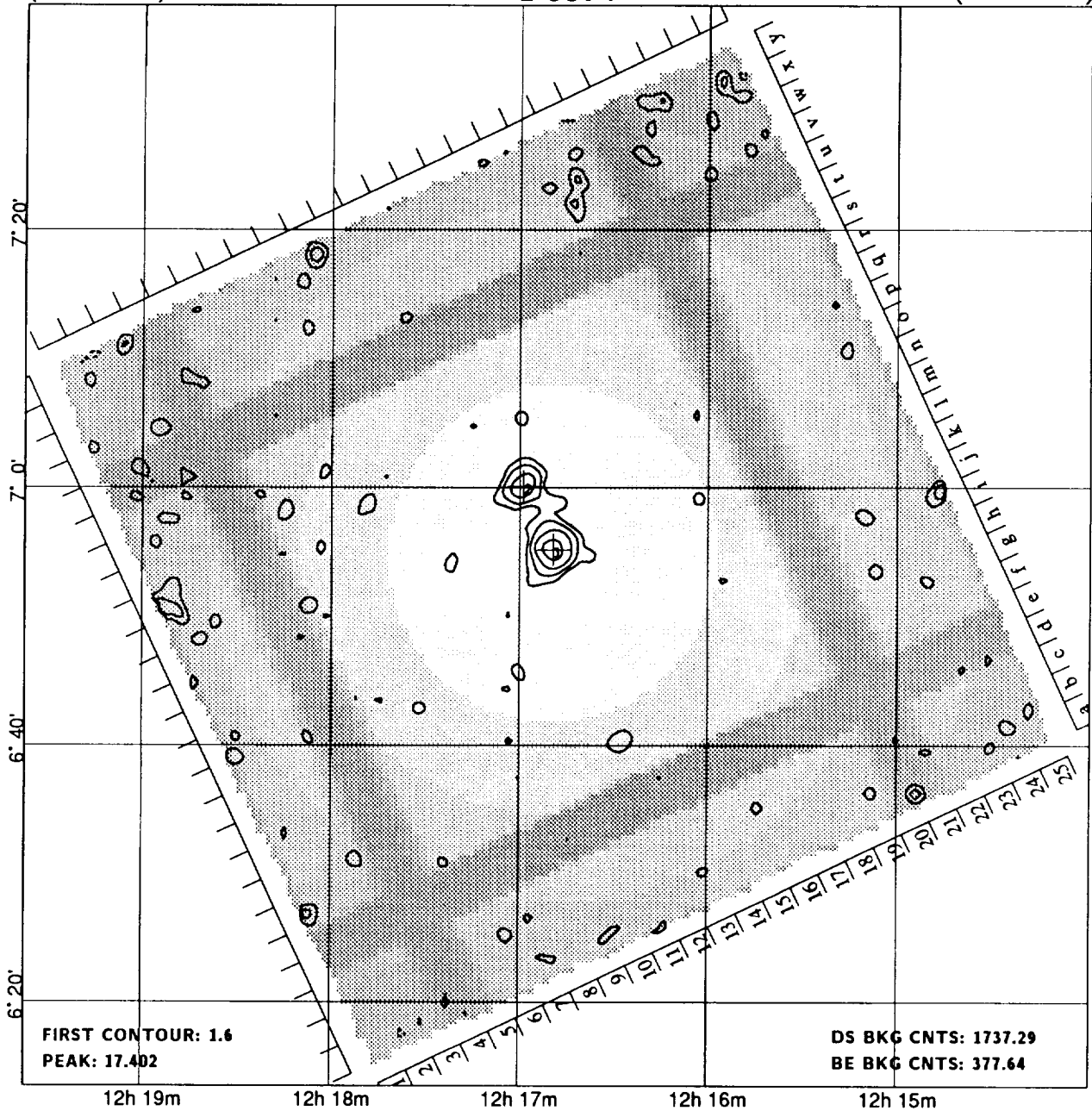
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
2655	1L	12 16 50.1	06 06 24	31	0.0204	0.0032	105.0	76.0	6.3	1.5	0	0.8	A G
2658	2L	12 17 15.4	06 02 23	38	0.0172	0.0028	81.7	42.3	6.0	1.3	0	8.5	

(12h 16m)

I 5374

(12h 16m)



**FIELD CENTER:**  $12^{\text{h}}16^{\text{m}}48.2^{\text{s}}$   $06^{\circ}55'25''$  (B1950)  
 $12^{\text{h}}19^{\text{m}}21.3^{\text{s}}$   $06^{\circ}38'46''$  (J2000)  
 $l: 281.07$   $b: 68.15$

**DATE:** 1980/346 - 1980/346  
**LIVETIME:** 1407.8s  
**ROLL ANGLE:**  $-115.3^{\circ}$

**NH:**  $1.6\text{E}+20$   
**REF/ID:**  
**FIELD FLAGS:**

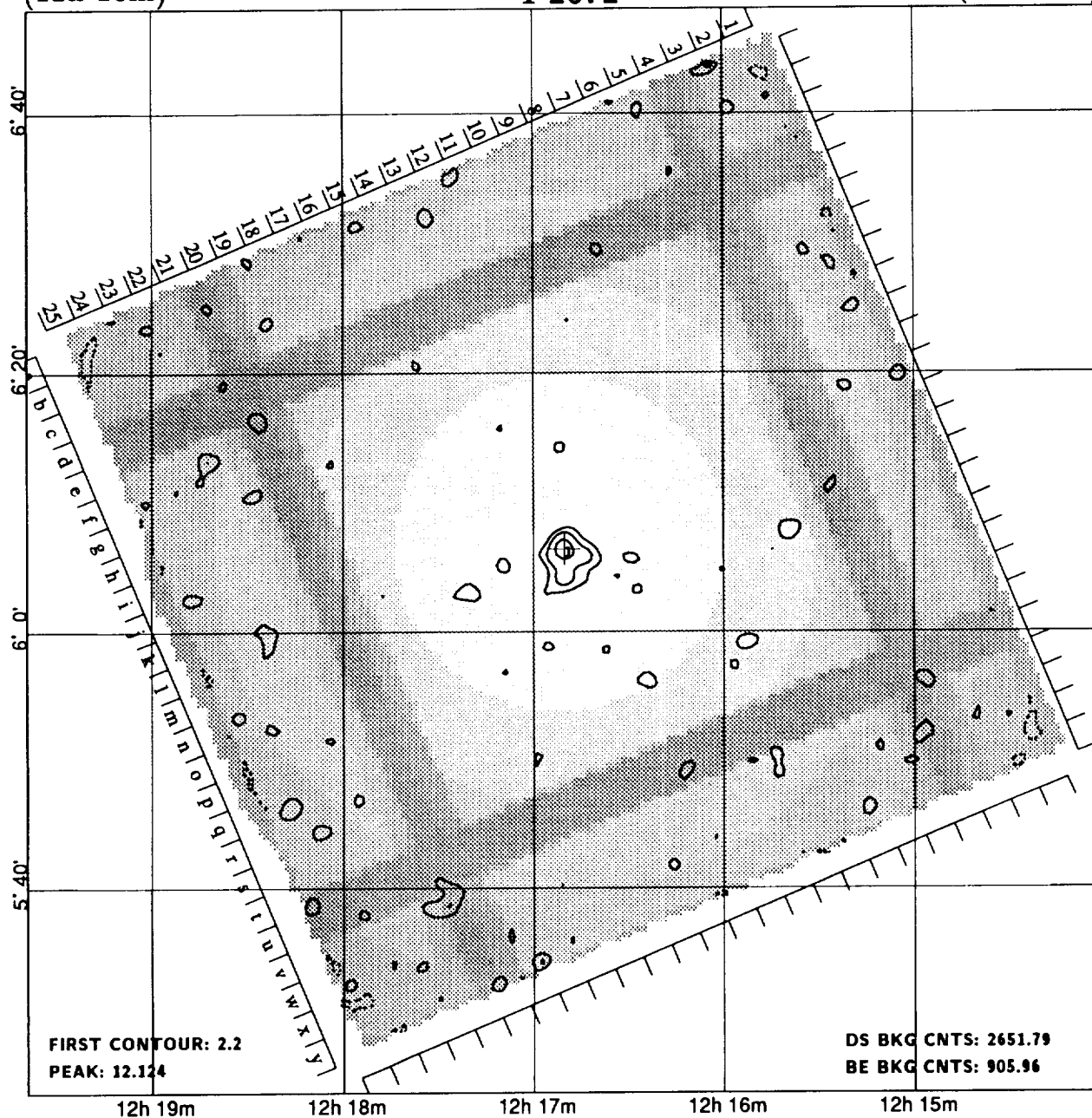
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2654	1	12 16 49.2	06 55 07	32	0.0740	0.0087	77.8	5.2	8.5	2.0	0	0.4	H	Q
2656	2	12 16 58.8	07 00 06	41	0.0450	0.0071	44.8	5.2	6.3	4.0	0	5.6	H	



(12h 16m)

I 2672

(12h 16m)



## 3C 270.0: BRIGHT X-GALACTIC RADIO SOURCES

FIELD CENTER:  $12^h 16^m 50.1^s$   $06^\circ 06' 08''$  (B1950)  
 $12^h 19^m 23.3^s$   $05^\circ 49' 29''$  (J2000)  
 $l: 281.81$   $b: 67.37$

DATE: 1979/181 - 1979/181  
 LIVETIME: 2148.8s  
 ROLL ANGLE:  $67.2^\circ$

NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

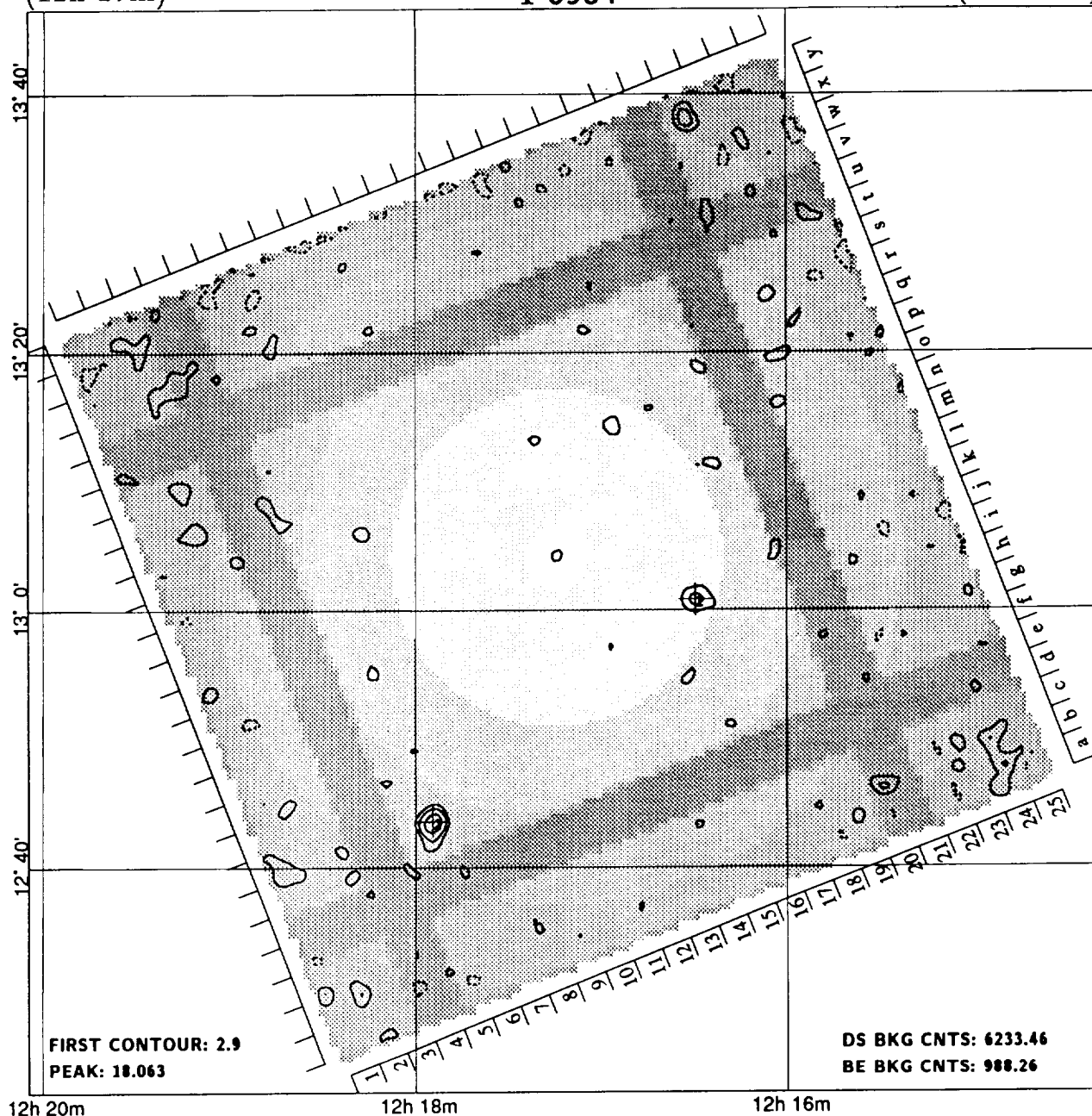
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2655	1	12 16 50.3	06 06 23	35	0.0281	0.0046	45.1	8.9	6.1	1.5	0	0.2	AH	G



(12h 17m)

I 6984

(12h 17m)

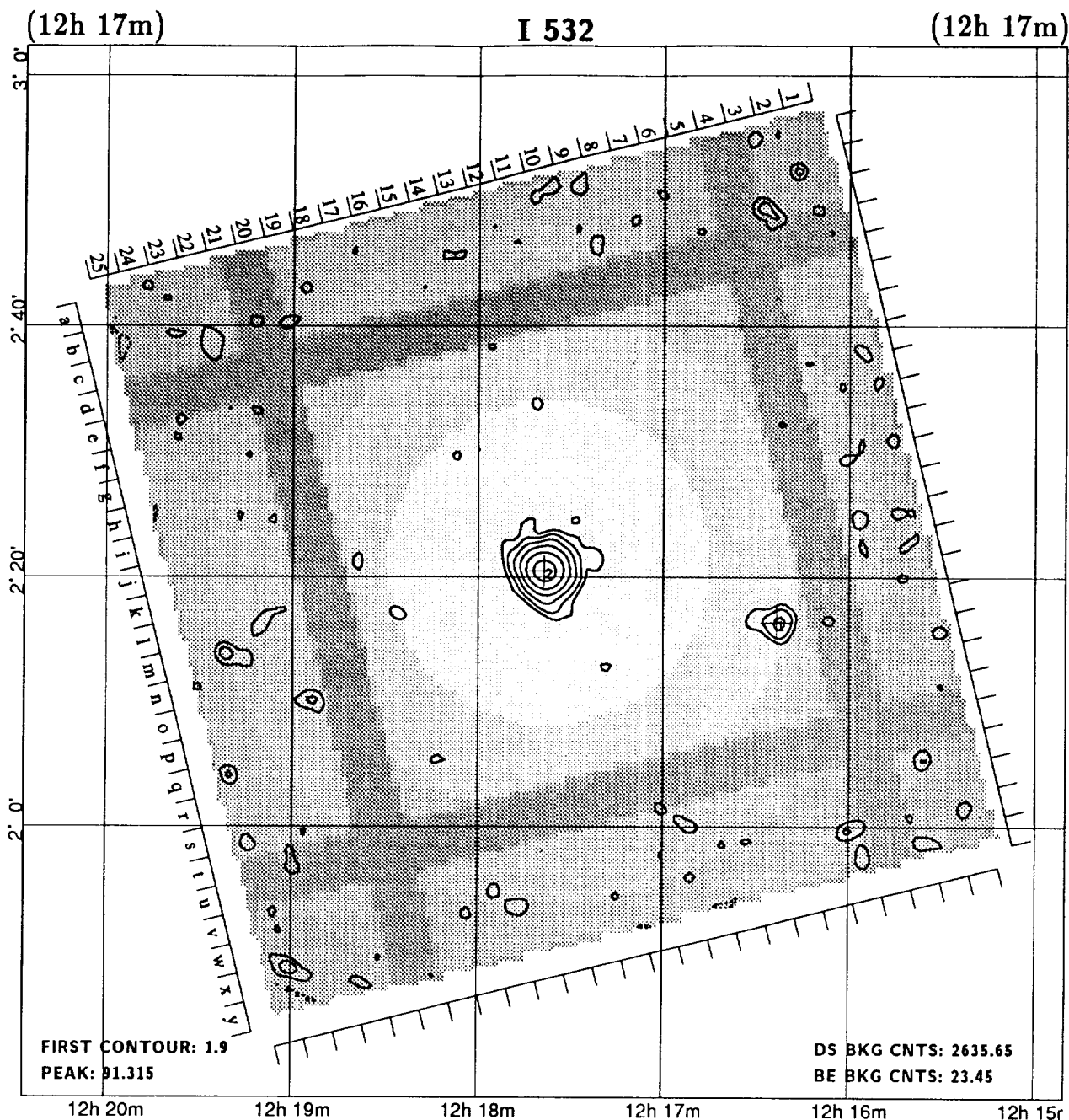


FIELD CENTER:  $12^{\text{h}}17^{\text{m}}12.6^{\text{s}}$   $13^{\circ}04'35''$  (B1950)  
 $12^{\text{h}}19^{\text{m}}45.1^{\text{s}}$   $12^{\circ}47'57''$  (J2000)  
 $\ell$ : 274.01  $b$ : 73.86

DATE: 1979/351 - 1979/351  
 LIVETIME: 5051.2s  
 ROLL ANGLE:  $-111.4^{\circ}$

NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2653	1	12 16 29.4	13 00 50	45	0.0073	0.0020	24.0	17.0	3.7	0.6	0	11.1	
2662	2	12 17 54.4	12 43 38	50	0.0143	0.0029	33.8	13.2	4.9	0.9	0	23.1	H



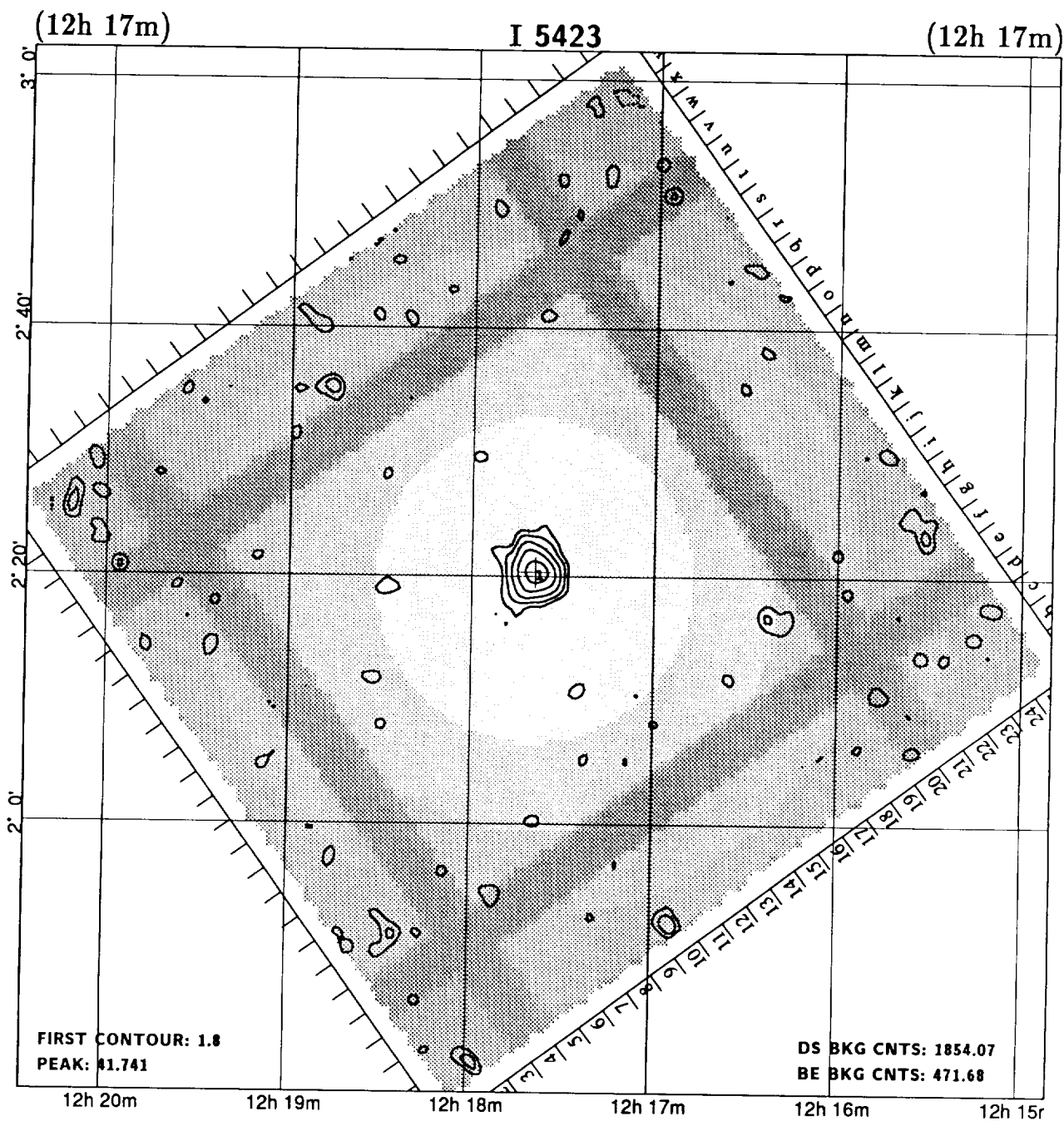
QSO 1217+023 QUASAR SURVEY

FIELD CENTER:  $12^h 17^m 38.3^s$   $02^\circ 20' 20''$  (B1950)  
 $12^h 20^m 11.8^s$   $02^\circ 03' 42''$  (J2000)  
 $l: 284.99$   $b: 63.84$

DATE: 1979/171 - 1979/171  
 LIVETIME: 2135.7s  
 ROLL ANGLE:  $76.1^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2652	1	12 16 23.3	02 16 21	51	0.0210	0.0047	23.7	4.3	4.5	1.0	0	19.2	H	
2661	2	12 17 38.6	02 20 30	31	0.251	0.013	399.4	6.6	19.8	1.4	0	0.2	AH	Q



FIELD CENTER:  $12^h 17^m 38.3^s$   $02^\circ 20' 20''$  (B1950)  
 $12^h 20^m 11.8^s$   $02^\circ 03' 42''$  (J2000)  
 $l: 284.99$   $b: 63.84$

DATE: 1980/347 - 1980/347  
 LIVETIME: 1502.4s  
 ROLL ANGLE:  $-126.3^\circ$

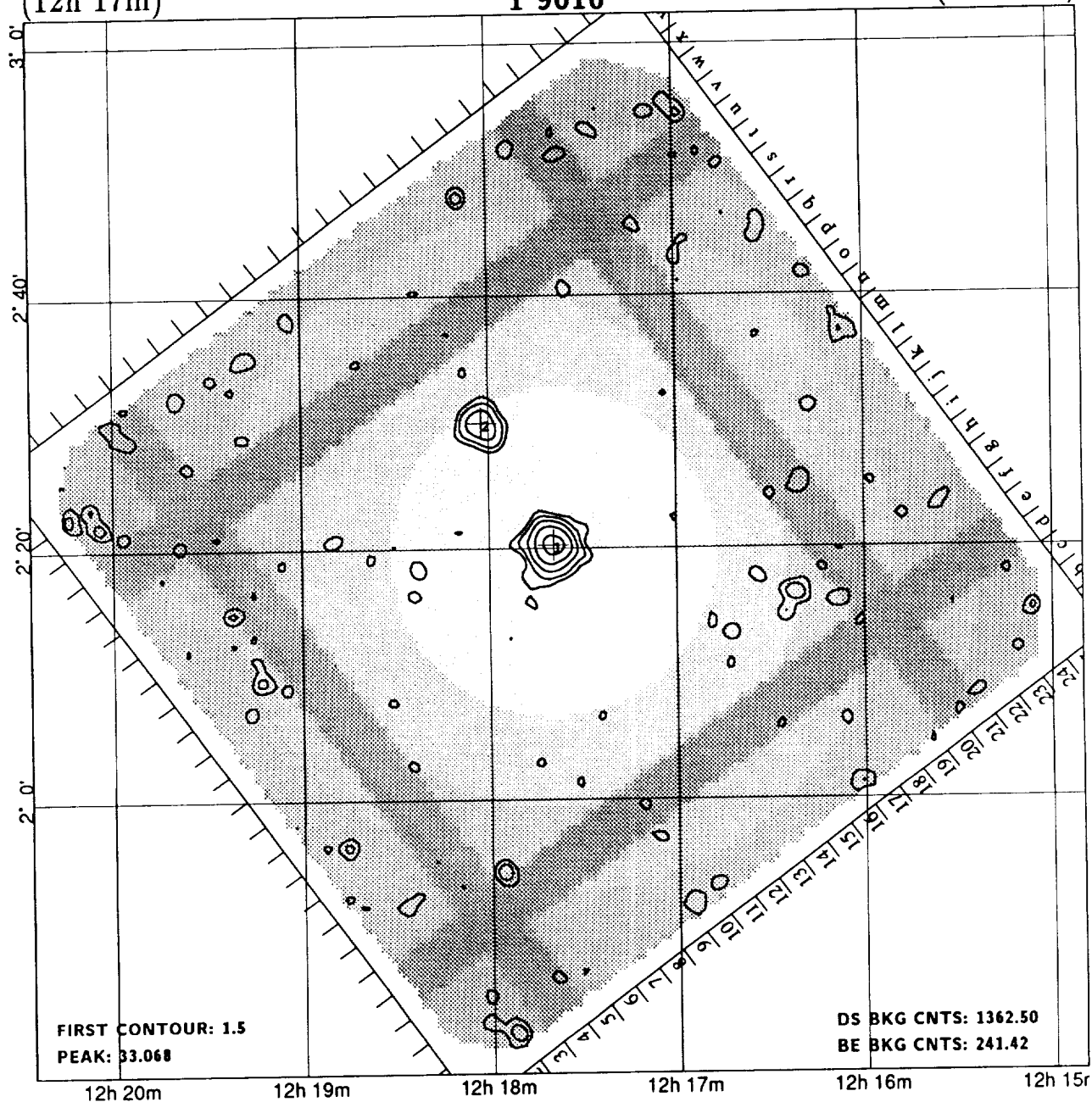
NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2661	1L	12 17 39.1	02 20 19	31	0.124	0.015	139.3	53.7	8.4	1.5	0	0.3	A	Q

(12h 17m)

I 9610

(12h 17m)



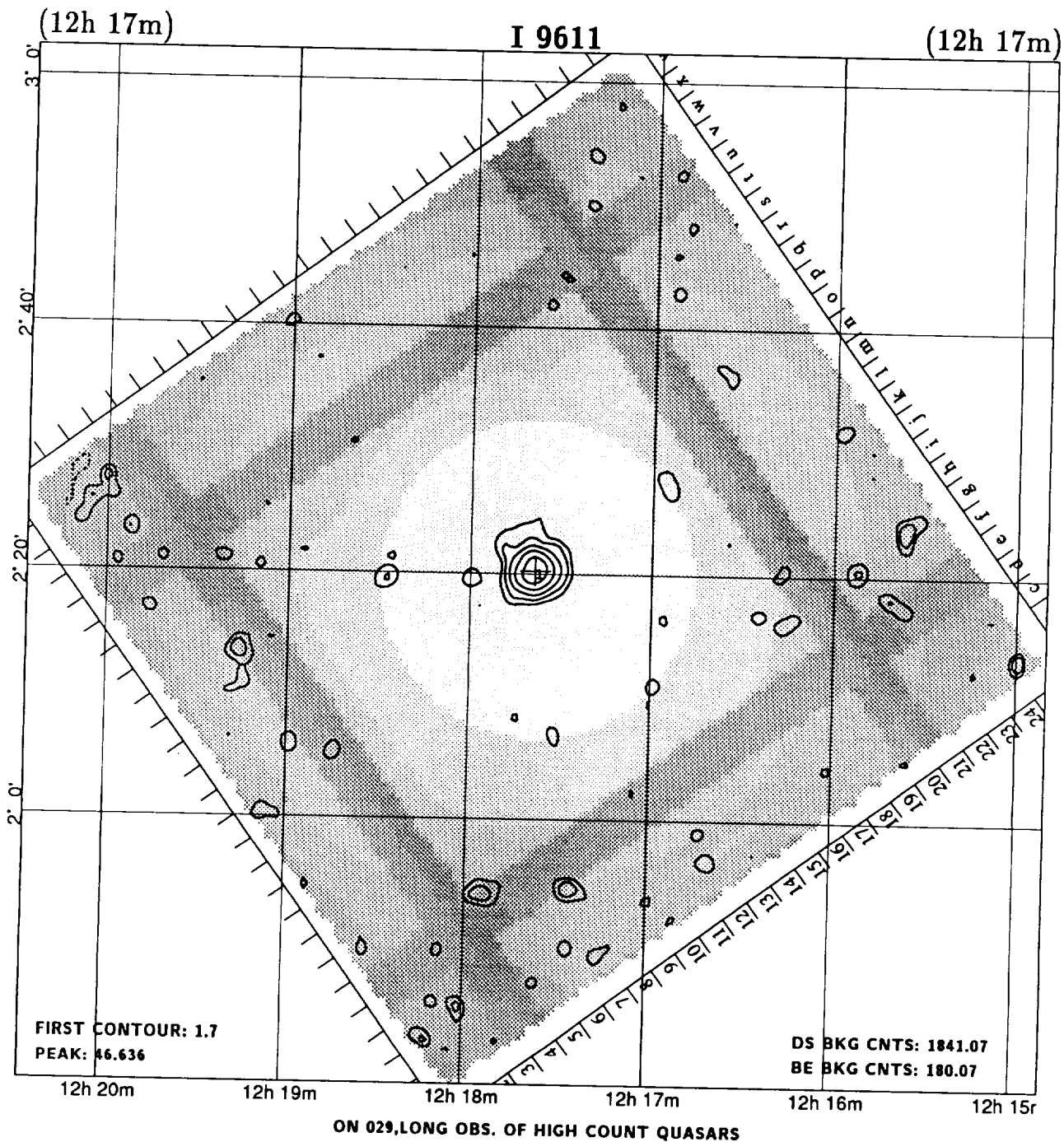
ON 029, LONG OBS. OF HIGH COUNT QUASARS

FIELD CENTER:  $12^h 17^m 38.3^s$   $02^\circ 20' 20''$  (B1950)  
 $12^h 20^m 11.8^s$   $02^\circ 03' 42''$  (J2000)  
 $l: 284.99$   $b: 63.84$

DATE: 1980/348 - 1980/348  
 LIVETIME: 1104.1s  
 ROLL ANGLE:  $-126.3^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2661	1	12 17 39.4	02 20 15	31	0.180	0.015	148.0	4.0	12.0	1.4	0	0.4	AH	Q
2663	2	12 18 02.3	02 29 58	41	0.0568	0.0093	40.3	3.7	6.1	1.2	0	11.6	H	



FIELD CENTER:  $12^h 17^m 38.3^s$   $02^\circ 20' 20''$  (B1950)  
 $12^h 20^m 11.8^s$   $02^\circ 03' 42''$  (J2000)  
 $l: 284.99$   $b: 63.84$

DATE: 1980/348 - 1980/348  
 LIVETIME: 1491.9s  
 ROLL ANGLE:  $-126.3^\circ$

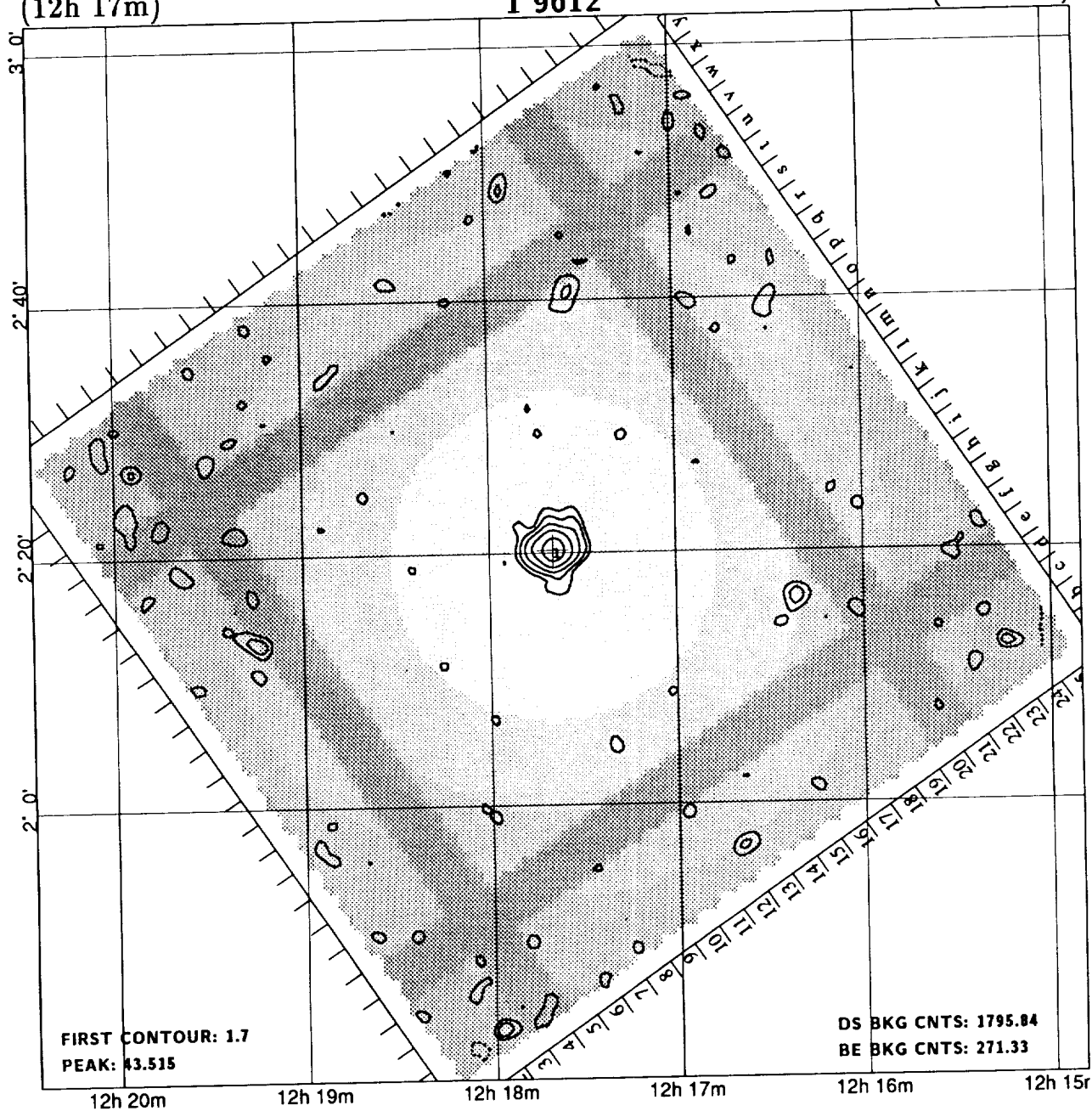
NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2661	1	12 17 38.6	02 20 14	31	0.184	0.013	204.2	4.8	14.1	1.4	0	0.4	AH	Q

(12h 17m)

I 9612

(12h 17m)

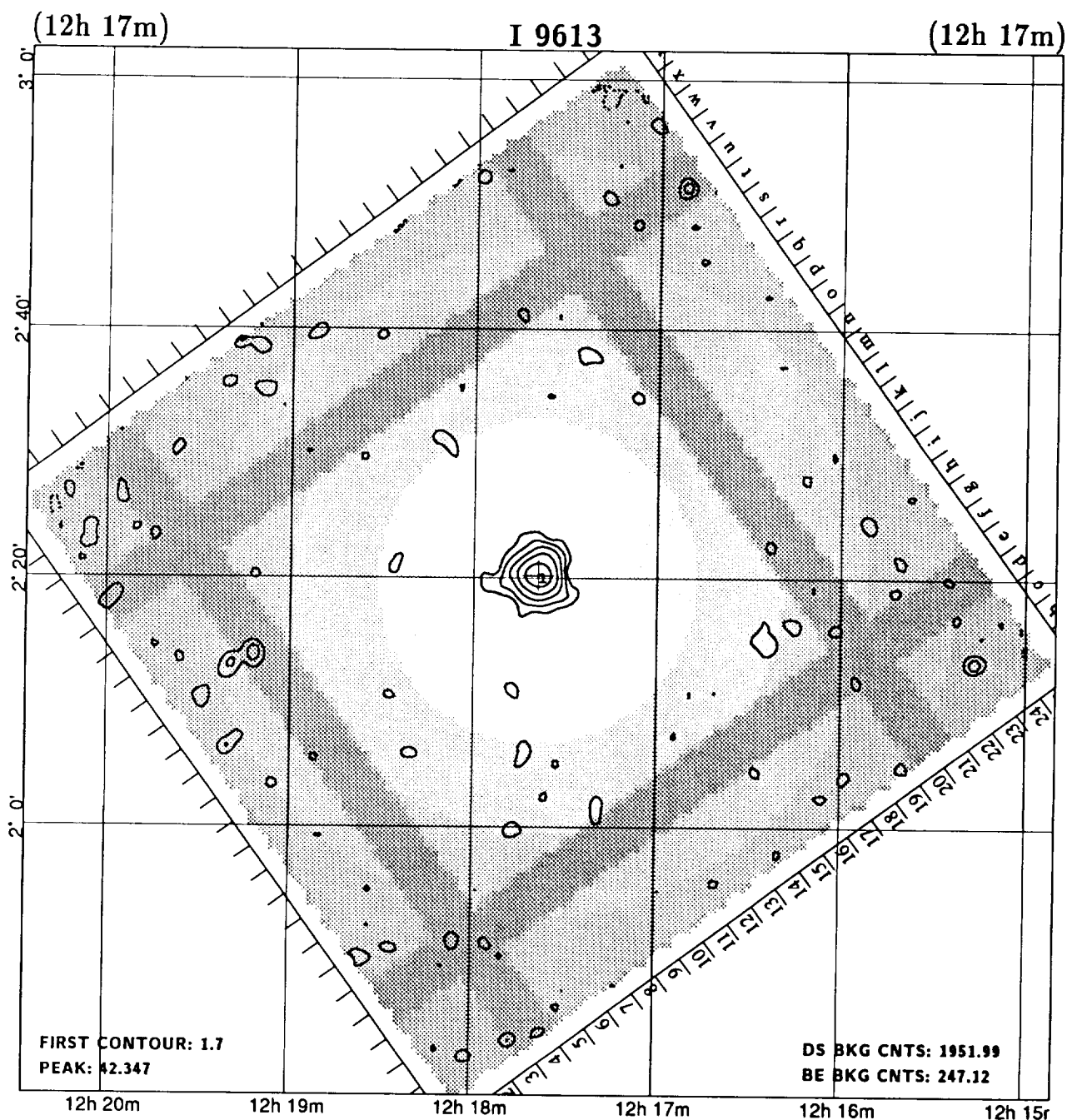


FIELD CENTER:  $12^h 17^m 38.3^s$   $02^\circ 20' 20''$  (B1950)  
 $12^h 20^m 11.8^s$   $02^\circ 03' 42''$  (J2000)  
 $l: 284.99$   $b: 63.84$

DATE: 1980/349 - 1980/349  
 LIVETIME: 1455.2s  
 ROLL ANGLE:  $-124.3^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2661	1	12 17 39.6	02 20 13	31	0.166	0.013	179.9	5.1	13.2	1.4	0	0.4	AH	Q



ON 029, LONG OBS. OF HIGH COUNT QUASARS

FIELD CENTER:  $12^h 17^m 38.3^s$   $02^\circ 20' 20''$  (B1950)  
 $12^h 20^m 11.8^s$   $02^\circ 03' 42''$  (J2000)  
 $l: 284.99$   $b: 63.84$

DATE: 1980/349 - 1980/349  
 LIVETIME: 1581.8s  
 ROLL ANGLE:  $-126.3^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: C

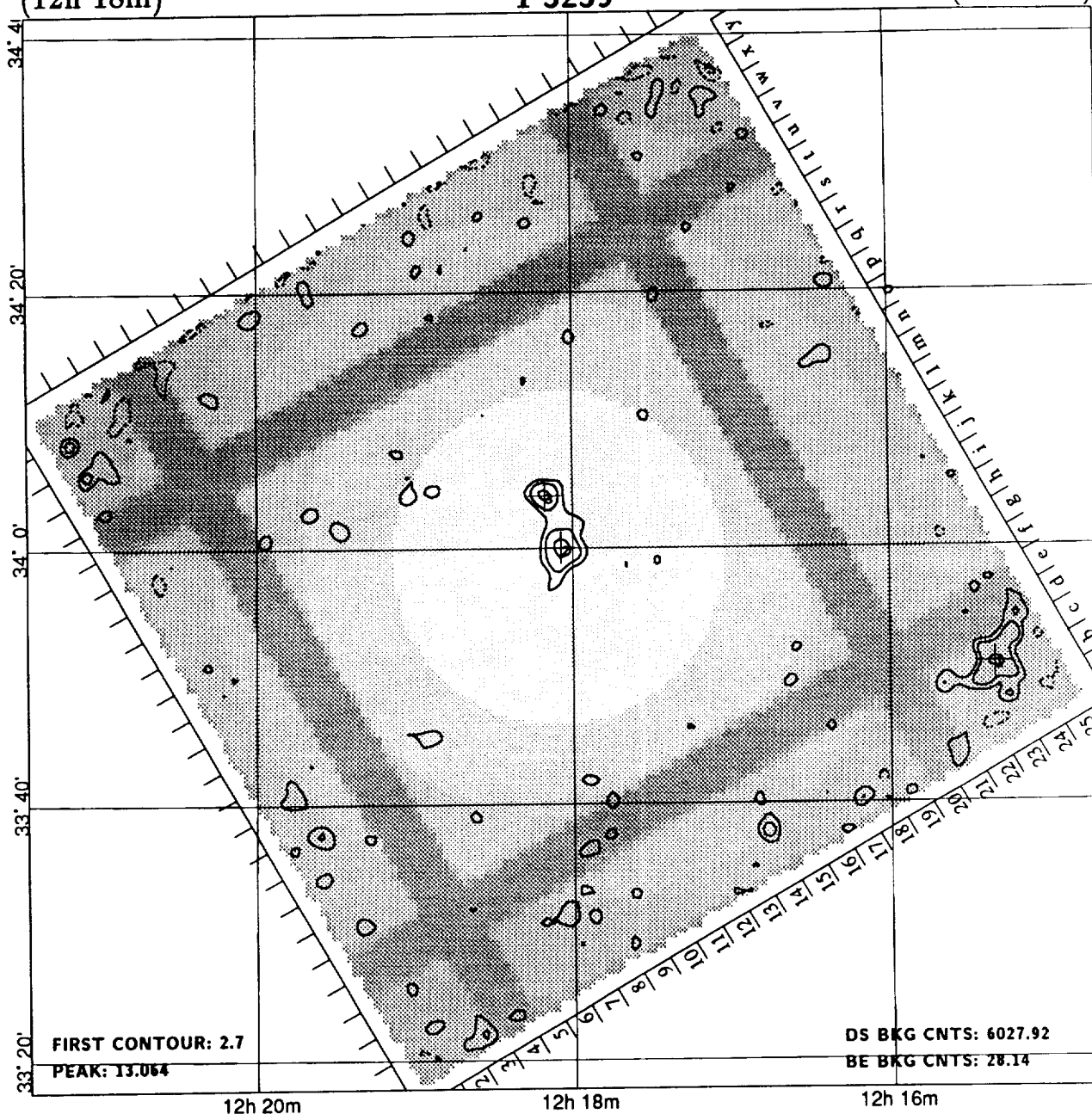
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2661	1	12 17 38.8	02 20 12	31	0.174	0.012	205.6	5.4	14.2	1.5	0	0.4	AH	Q



(12h 18m)

I 3239

(12h 18m)



## 3C270.1: DISTANT CLUSTERS ASSOCIATED WITH QSO'S

FIELD CENTER:  $12^{\text{h}}18^{\text{m}}04.0^{\text{s}}$   $33^{\circ}59'49''$  (B1950)  
 $12^{\text{h}}20^{\text{m}}33.9^{\text{s}}$   $33^{\circ}43'11''$  (J2000)  
 $l: 166.31$   $b: 80.64$

DATE: 1979/342 - 1979/342  
 LIVETIME: 4884.6s  
 ROLL ANGLE:  $-120.0^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

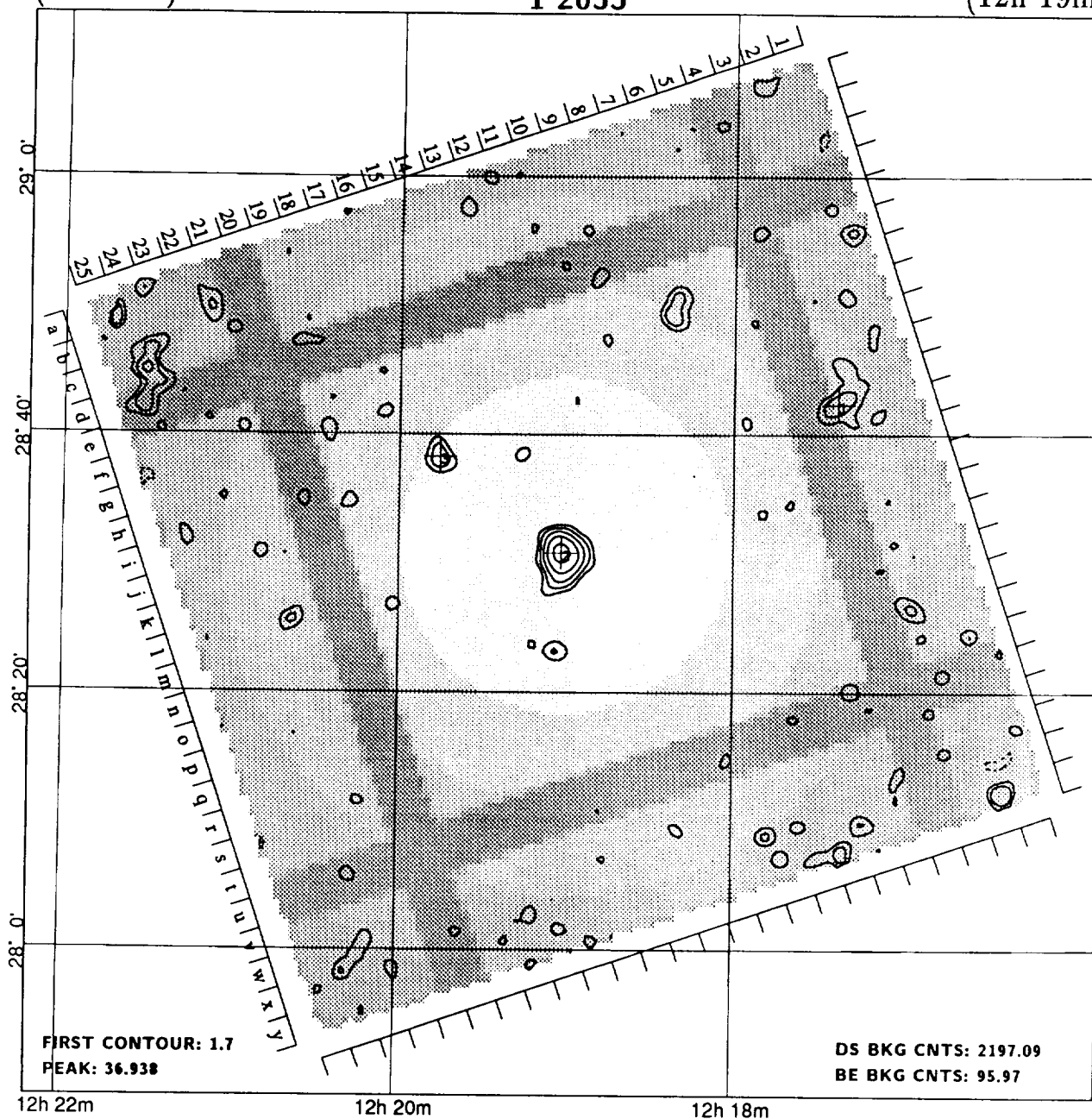
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2643	1	12 15 20.6	33 50 52	57	0.0173	0.0042	22.5	7.5	4.1	2.1	200	35.1	H	
2664	2	12 18 04.7	34 00 01	35	0.0171	0.0024	62.3	14.7	7.1	2.0	0	0.4	H	
2666	3	12 18 10.6	34 04 07	35	0.0121	0.0022	42.3	15.7	5.6	2.7	0	4.6	H	



(12h 19m)

I 2035

(12h 19m)



## X-RAY STUDY OF QUASARS: ON 231

FIELD CENTER:  $12^{\text{h}}19^{\text{m}}01.1^{\text{s}}$   $28^{\circ}30'35''$  (B1950)  
 $12^{\text{h}}21^{\text{m}}31.6^{\text{s}}$   $28^{\circ}13'57''$  (J2000)  
 $l: 201.74$   $b: 83.29$

DATE: 1980/182 - 1980/182

NH:  $1.8\text{E}+20$ 

LIVETIME: 1780.4s

REF/ID:

ROLL ANGLE:  $71.5^{\circ}$ 

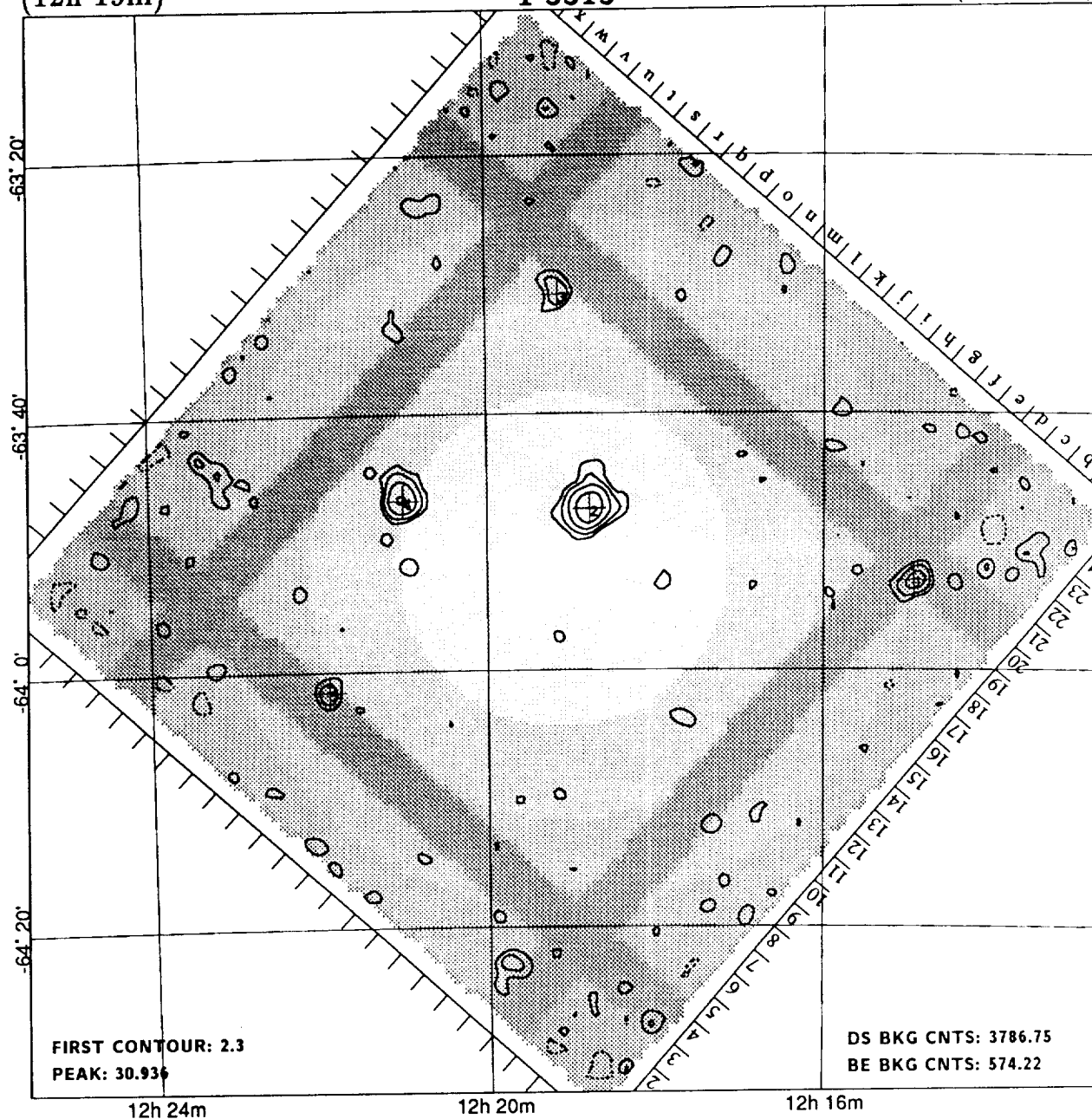
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2659	1	12 17 22.8	28 42 20	56	*0.0195	0.0055	15.5	3.5	3.6	1.3	1006	23.9	H	
2673	2	12 19 01.7	28 30 51	31	0.1073	0.0092	142.2	5.8	11.7	1.2	0	0.4	H	Q
2678	3	12 19 45.4	28 38 15	46	0.0144	0.0040	16.3	4.7	3.6	0.8	0	12.5	H	

(12h 19m)

I 5313

(12h 19m)



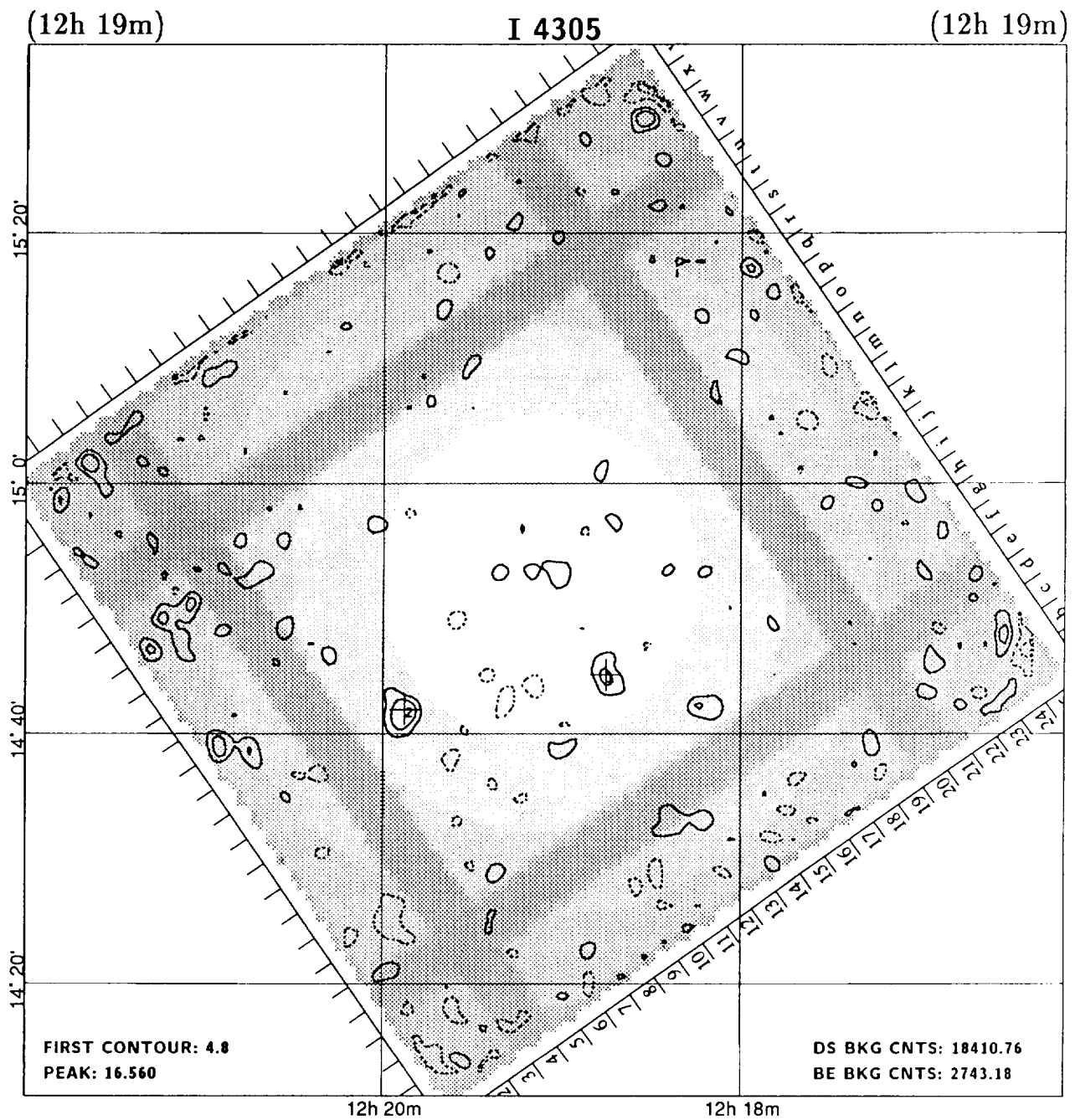
## SEARCH FOR YOUNG GALACTIC SNR

FIELD CENTER:  $12^h 19^m 05.1^s$   $-63^\circ 50' 47''$  (B1950)  
 $12^h 21^m 51.0^s$   $-64^\circ 07' 26''$  (J2000)  
 $l: 299.71$   $b: -1.44$

DATE: 1980/ 39 - 1980/ 39  
 LIVETIME: 3068.5s  
 ROLL ANGLE:  $-138.6^\circ$

NH:  $1.5E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE $\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
2639	1	12 14 55.9	-63 53 02	52	*0.0198 0.0044	23.7	4.3	4.5	0.9	1509	27.7	
2671	2	12 18 46.8	-63 47 27	31	0.0645 0.0056	142.2	10.8	11.5	1.3	0	4.1	H
2675	3	12 19 08.7	-63 30 51	55	*0.0134 0.0035	20.6	7.4	3.9	0.8	601	20.1	H
2689	4	12 20 59.8	-63 46 44	41	0.0344 0.0046	64.9	10.1	7.5	1.1	0	13.3	H
2692	5	12 21 53.9	-64 01 34	55	*0.0106 0.0030	16.1	4.9	3.5	0.7	1008	21.6	



**VIRGO CLUSTER FOLLOW-UP: NGC 4298 4302**

FIELD CENTER:  $12^h 19^m 06.0^s$   $14^\circ 52' 59''$  (B1950)  
 $12^h 21^m 38.2^s$   $14^\circ 36' 21''$  (J2000)  
 $l$ : 272.44  $b$ : 75.68

DATE: 1979/351 - 1979/353  
 LIVETIME: 14919.0s  
 ROLL ANGLE: -125.0°

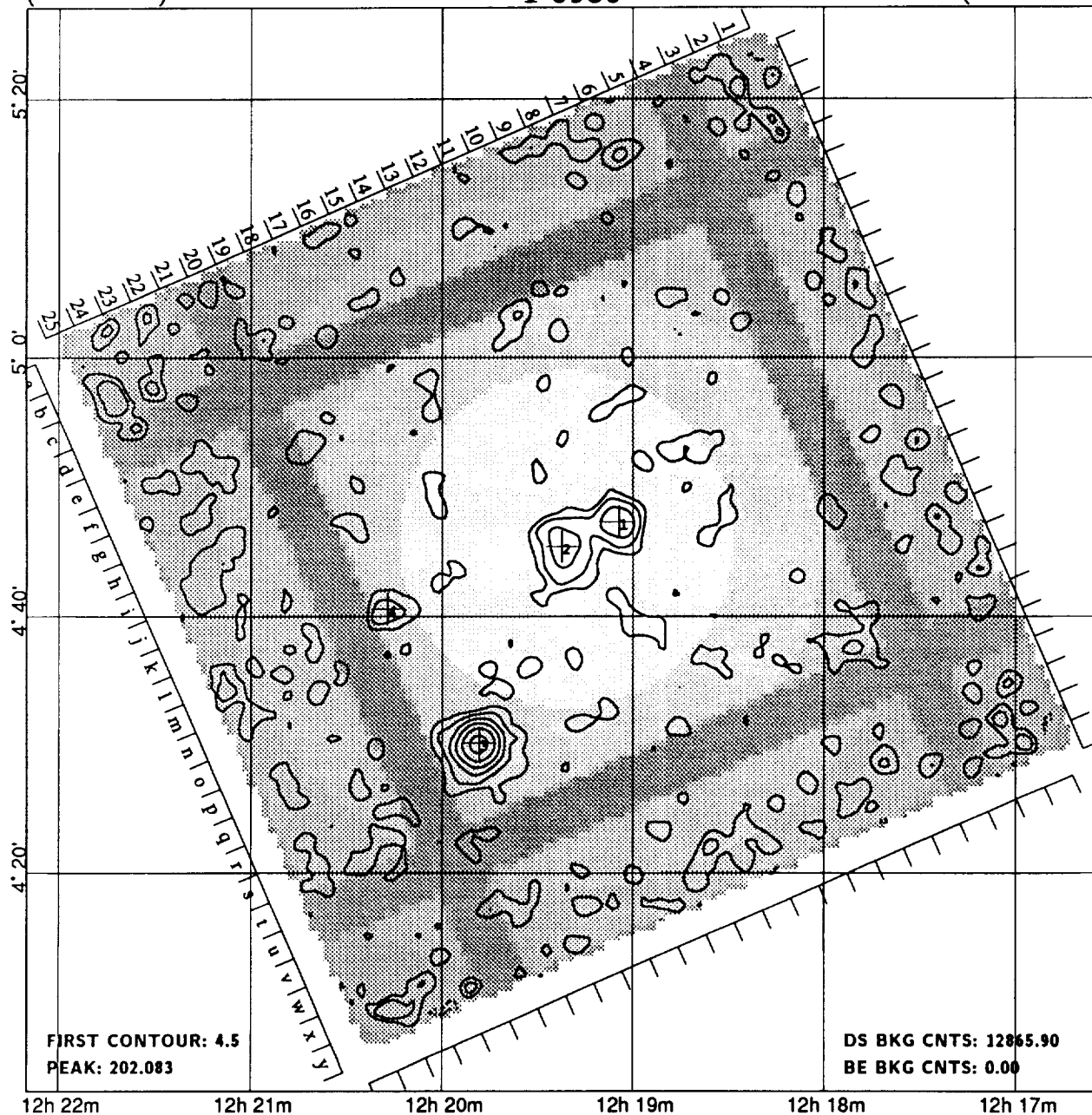
NH: 2.7E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2670	1	12 18 45.1	14 44 44	42	0.00427	0.00095	42.8	48.2	4.5	0.8	0	9.4	H	
2680	2	12 19 52.8	14 41 57	50	0.0064	0.0011	56.4	44.6	5.6	1.1	0	15.7	H	

(12h 19m)

I 6986

(12h 19m)



## NGC 4303A/4301/4303/4292/4292A, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 19^m 21.6^s$   $04^\circ 45' 05''$  (B1950)

DATE: 1980/176 - 1980/176

NH:  $1.7E+20$  $12^h 21^m 54.8^s$   $04^\circ 28' 27''$  (J2000)

LIVETIME: 10425.6s

REF/ID:

 $\ell$ : 284.37  $b$ : 66.28ROLL ANGLE:  $66.5^\circ$ 

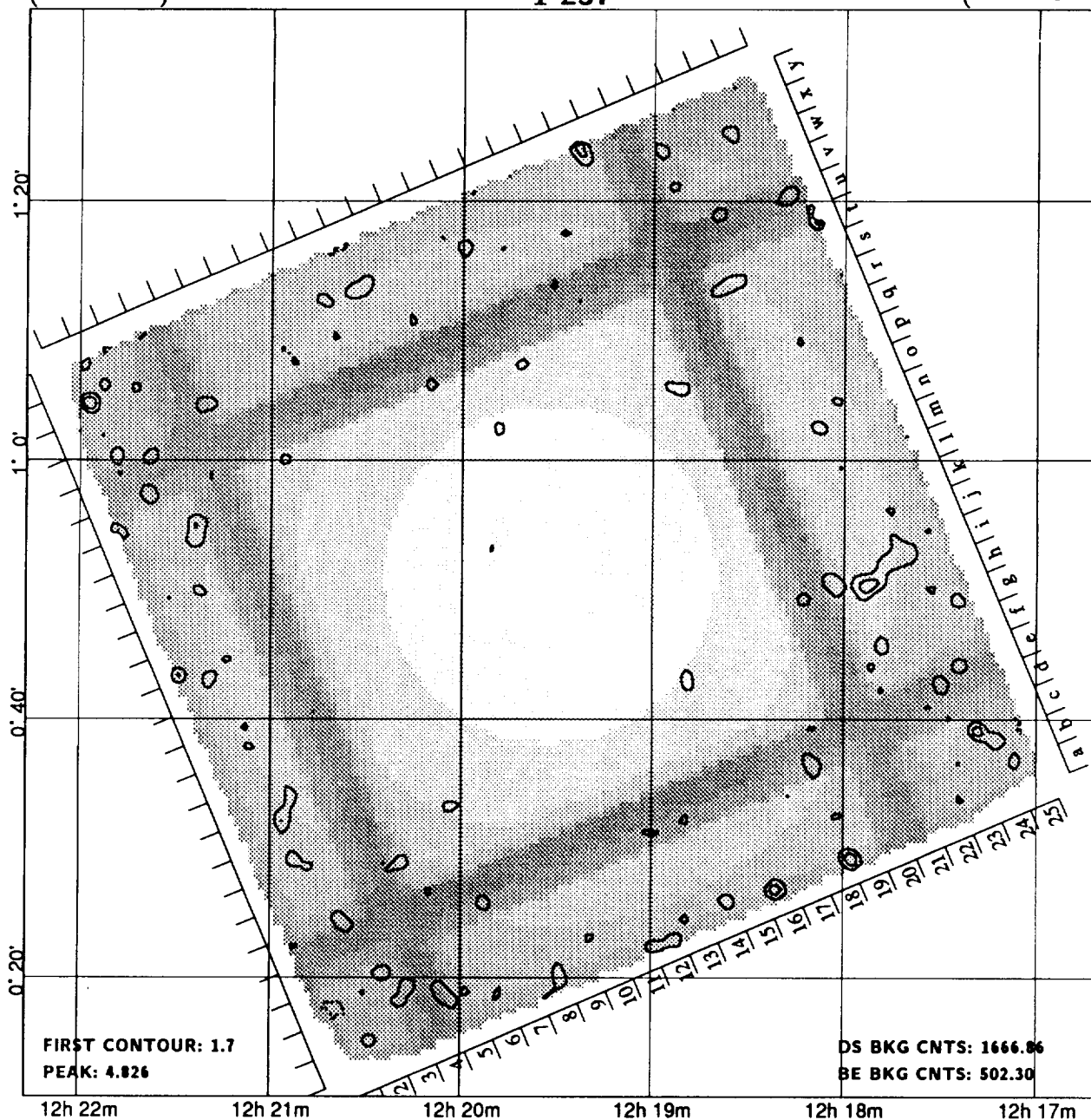
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2674	1L	12 19 04.3	04 47 19	31	0.0163	0.0022	122.3	65.7	7.3	3.3	0	4.7	A	Q
2676	2L	12 19 22.4	04 45 24	32	0.0080	0.0021	61.7	102.3	3.7	3.6	0	0.2	A	
2679	3L	12 19 48.3	04 30 04	47	0.0923	0.0048	534.1	74.9	18.9	1.3	0	16.4	A	*
2683	4L	12 20 17.2	04 40 33	46	0.0077	0.0019	47.1	34.9	3.9	1.1	500	14.6		

(12h 19m)

I 257

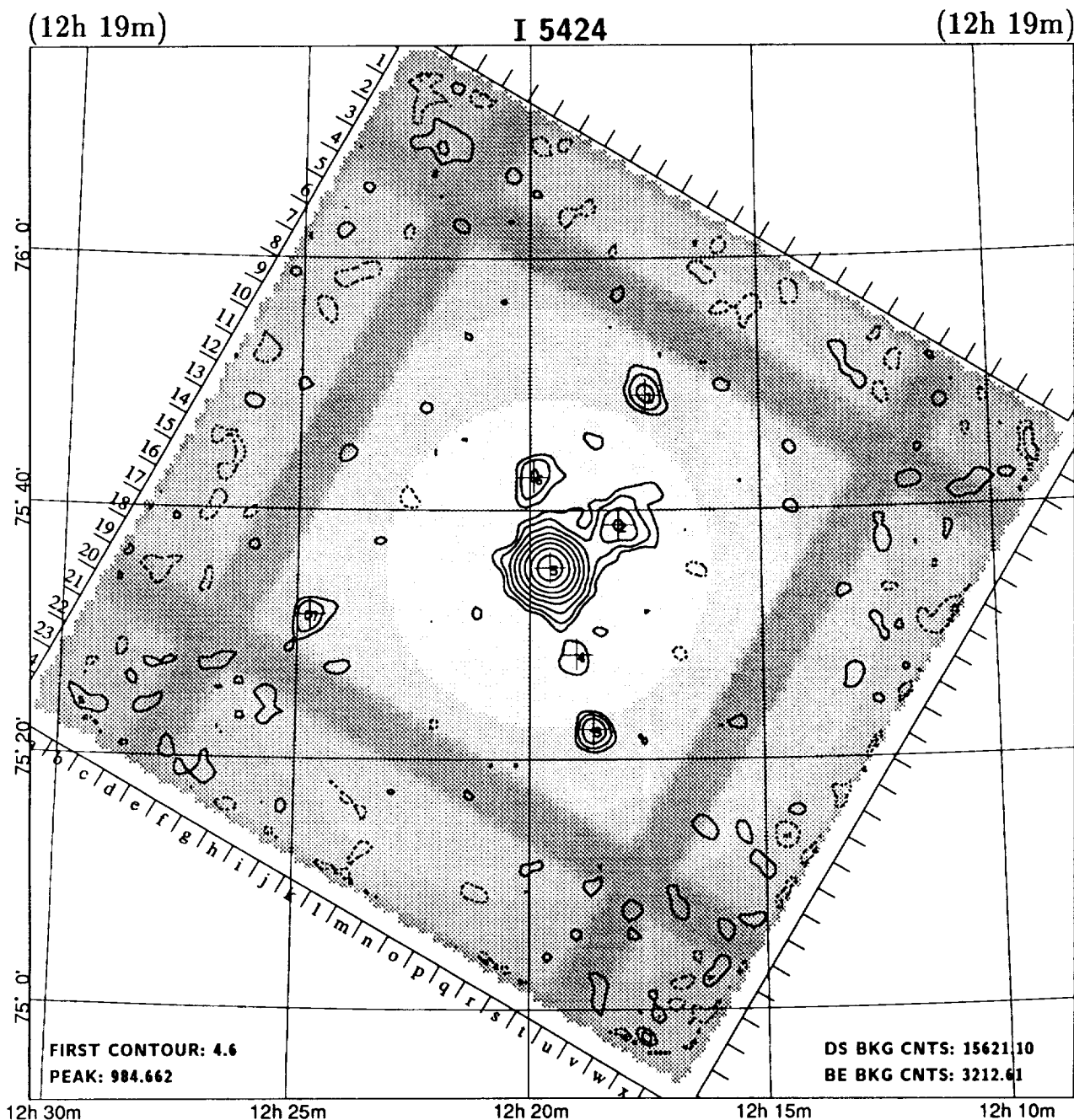
(12h 19m)



FIELD CENTER:  $12^h 19^m 28.8^s$   $00^\circ 52' 47''$  (B1950)  
 $12^h 22^m 02.5^s$   $00^\circ 36' 09''$  (J2000)  
 $l: 286.82$   $b: 62.55$

DATE: 1979/ 7 - 1979/ 7  
 LIVETIME: 1350.7s  
 ROLL ANGLE:  $-113.0^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: L



MKN 205, LONG OBS. OF HIGH COUNT QUASARS

FIELD CENTER:  $12^h 19^m 30.0^s$   $75^\circ 34' 59''$  (B1950)  
 $12^h 21^m 40.6^s$   $75^\circ 18' 21''$  (J2000)  
 $l: 125.45$   $b: 41.68$

DATE: 1980/111 - 1980/113  
 LIVETIME: 13112.9s  
 ROLL ANGLE:  $30.4^\circ$

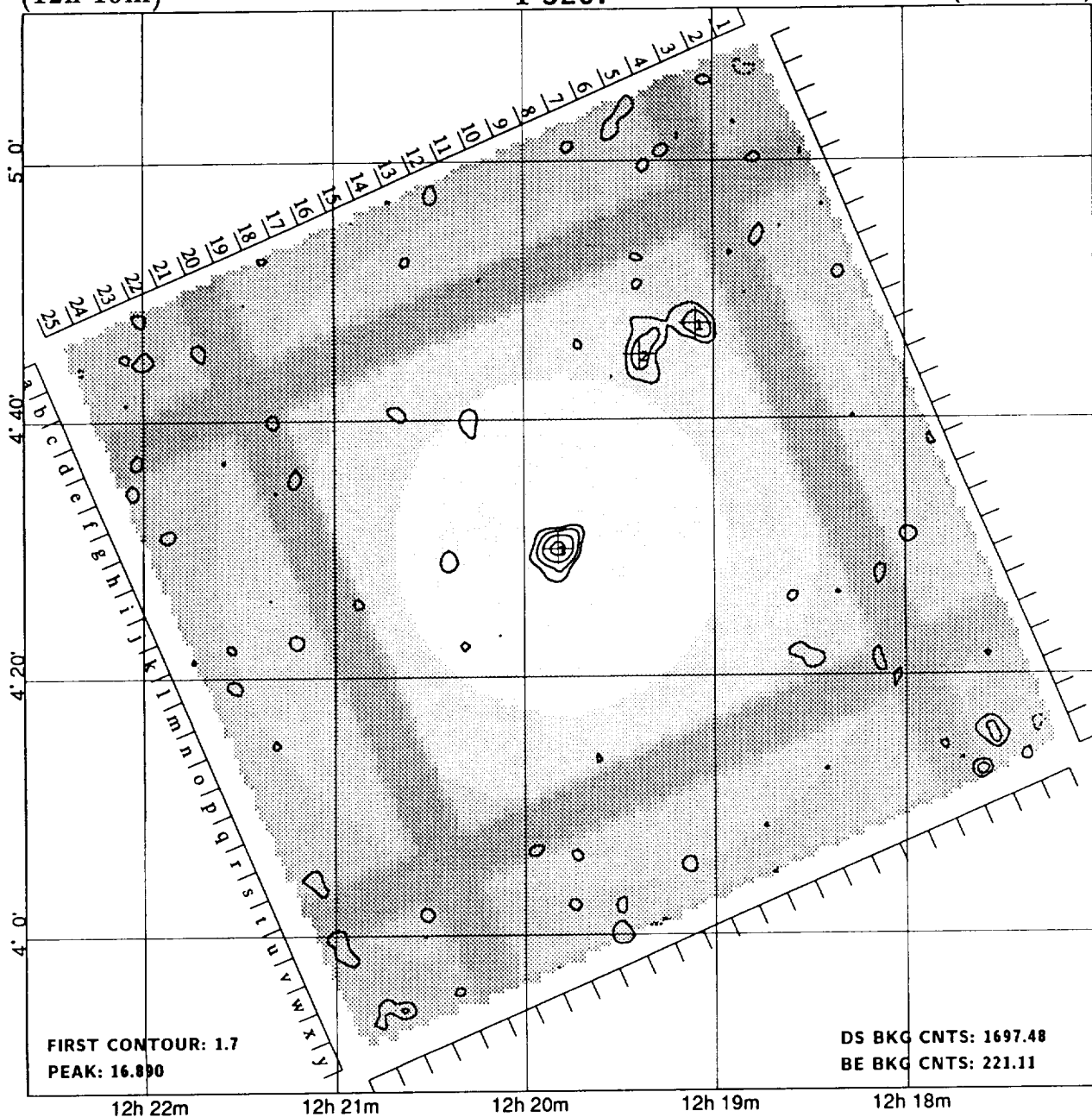
NH:  $2.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2660	1	12 17 28.9	75 49 04	50	0.0107	0.0014	82.0	36.0	7.5	1.0	0	16.2	H	
2665	2	12 18 05.3	75 38 48	38	0.0193	0.0016	177.4	47.6	11.8	32.4	0	6.7	AH	G
2669	3	12 18 38.4	75 22 26	38	0.0132	0.0015	105.8	43.2	8.7	0.9	0	12.8	H	AGN
2672	4	12 19 00.0	75 28 27	42	0.0050	0.0010	45.3	42.7	4.8	0.8	0	6.2	H	
2677	5	12 19 34.2	75 35 23	31	0.4449	0.0068	4350.4	47.6	65.6	1.4	0	0.4	AH	Q
2681	6	12 19 55.0	75 42 38	41	0.0094	0.0013	85.8	47.2	7.4	1.2	0	8.1	AH	CLG
2712	7	12 24 43.9	75 31 37	50	0.0079	0.0014	53.8	35.2	5.7	1.0	0	19.8	H	

(12h 19m)

I 3267

(12h 19m)



EXTRAGALACTIC STRONG MILLIMETER SOURCES: 1219+04

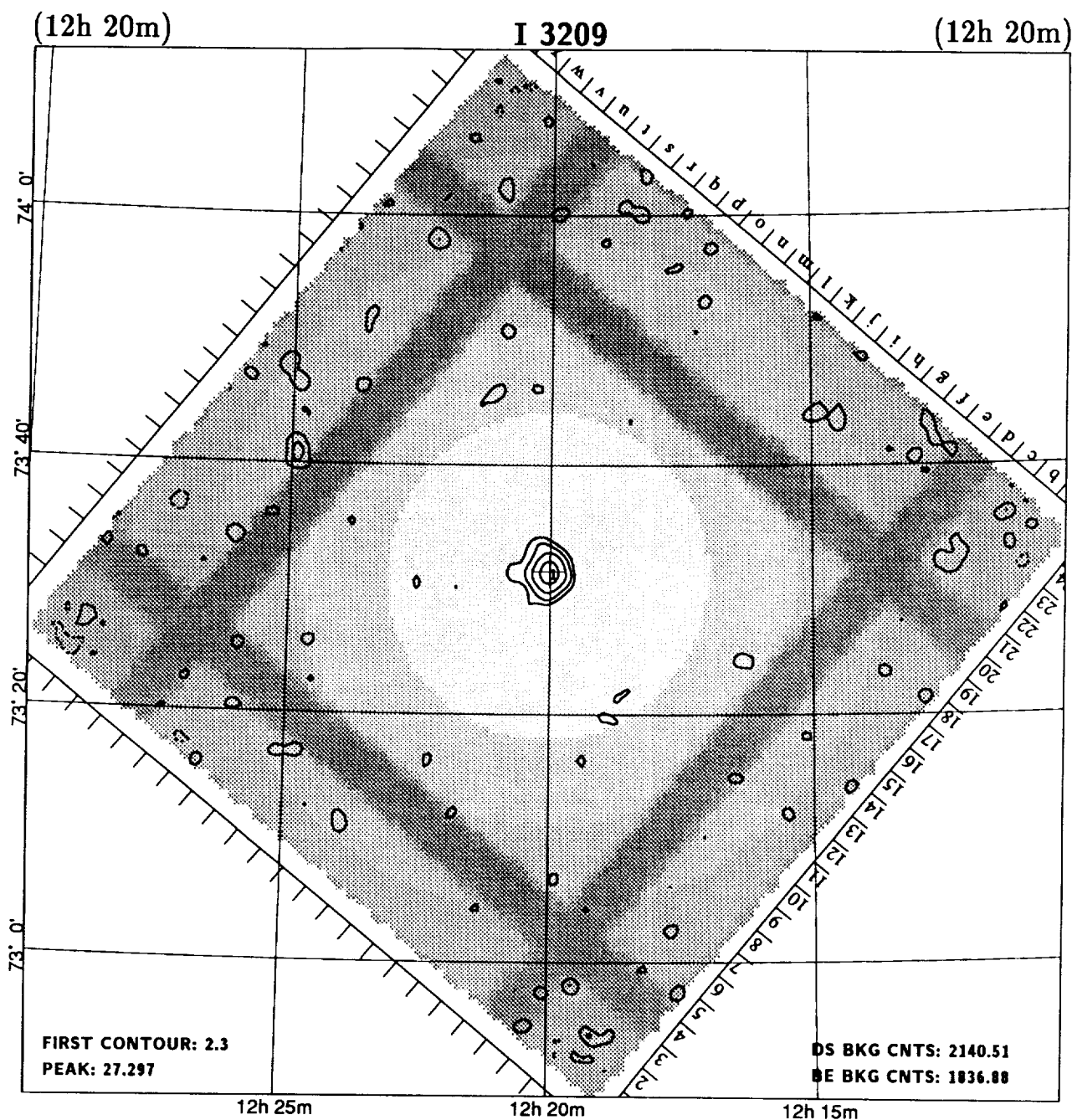
FIELD CENTER:  $12^h 19^m 49.2^s$   $04^\circ 29' 52''$  (B1950)  
 $12^h 22^m 22.5^s$   $04^\circ 13' 14''$  (J2000)  
 $l: 284.82$   $b: 66.07$

DATE: 1979/178 - 1979/178  
 LIVETIME: 1375.5s  
 ROLL ANGLE:  $66.7^\circ$

NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2674	1	12 19 05.6	04 47 24	55	0.0253	0.0066	17.7	3.3	3.9	2.4	0	20.7	AH	Q
2676	2	12 19 23.3	04 45 02	55	0.0195	0.0055	15.4	3.6	3.5	2.6	0	16.9	AH	
2679	3	12 19 49.3	04 29 59	34	0.0626	0.0081	64.2	4.8	7.7	1.1	0	0.2	AH	*





RS CVN SYSTEMS: AS DRA

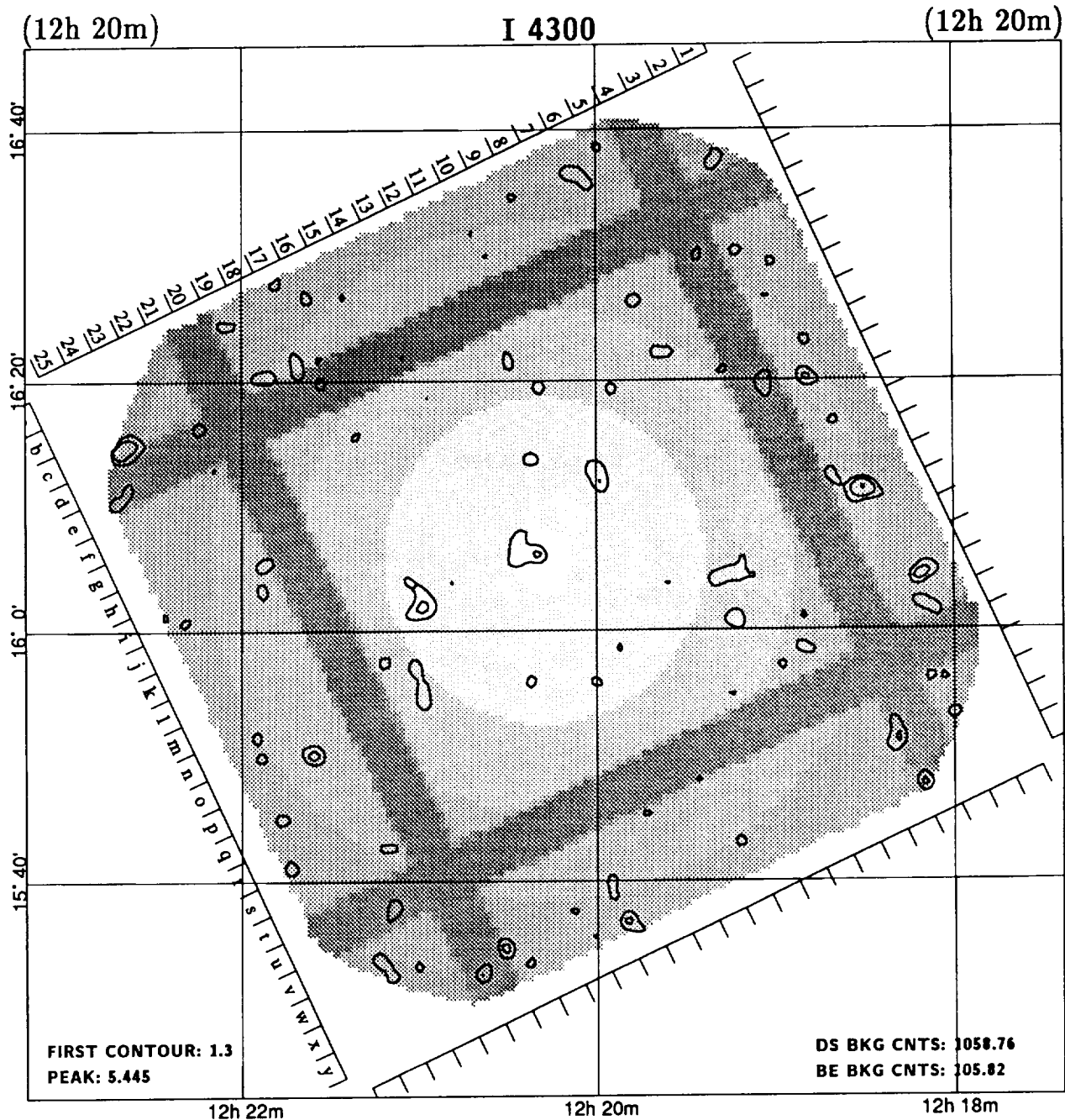
FIELD CENTER:  $12^h 20^m 03.9^s$   $73^\circ 31' 21''$  (B1950)  
 $12^h 22^m 17.0^s$   $73^\circ 14' 43''$  (J2000)  
 $l: 125.83$   $b: 43.72$

DATE: 1979/316 - 1979/316  
 LIVETIME: 1734.6s  
 ROLL ANGLE:  $-140.6^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2682	1L	12 20 01.4	73 31 29	31	0.080	0.010	103.7	24.3	7.8	1.3	0	0.2		CV



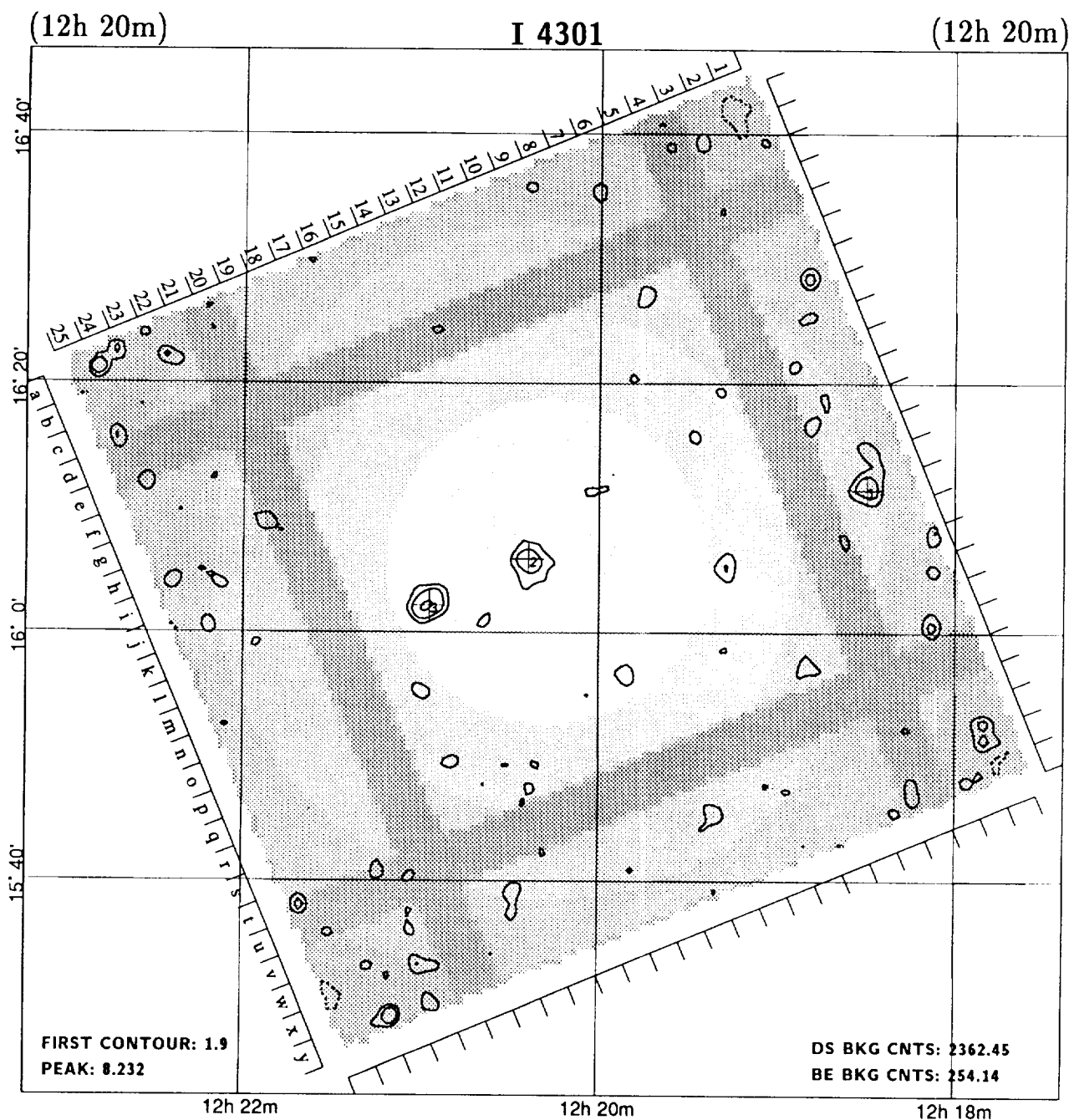


**RECENT SUPERNOVA IN NGC 4321**

FIELD CENTER:  $12^{\text{h}}20^{\text{m}}18.0^{\text{s}}$   $16^{\circ}04'47''$  (B1950)  
 $12^{\text{h}}22^{\text{m}}49.9^{\text{s}}$   $15^{\circ}48'10''$  (J2000)  
 $l$ : 271.10  $b$ : 76.87

DATE: 1979/168 - 1979/168  
 LIVETIME: 857.9s  
 ROLL ANGLE:  $64.9^{\circ}$

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C



RECENT SUPERNOVA IN NGC 4321

FIELD CENTER:  $12^h 20^m 18.0^s$   $16^\circ 04' 47''$  (B1950)  
 $12^h 22^m 49.9^s$   $15^\circ 48' 10''$  (J2000)  
 $l$ : 271.10  $b$ : 76.87

DATE: 1979/178 - 1979/178  
 LIVETIME: 1914.4s  
 ROLL ANGLE:  $67.5^\circ$

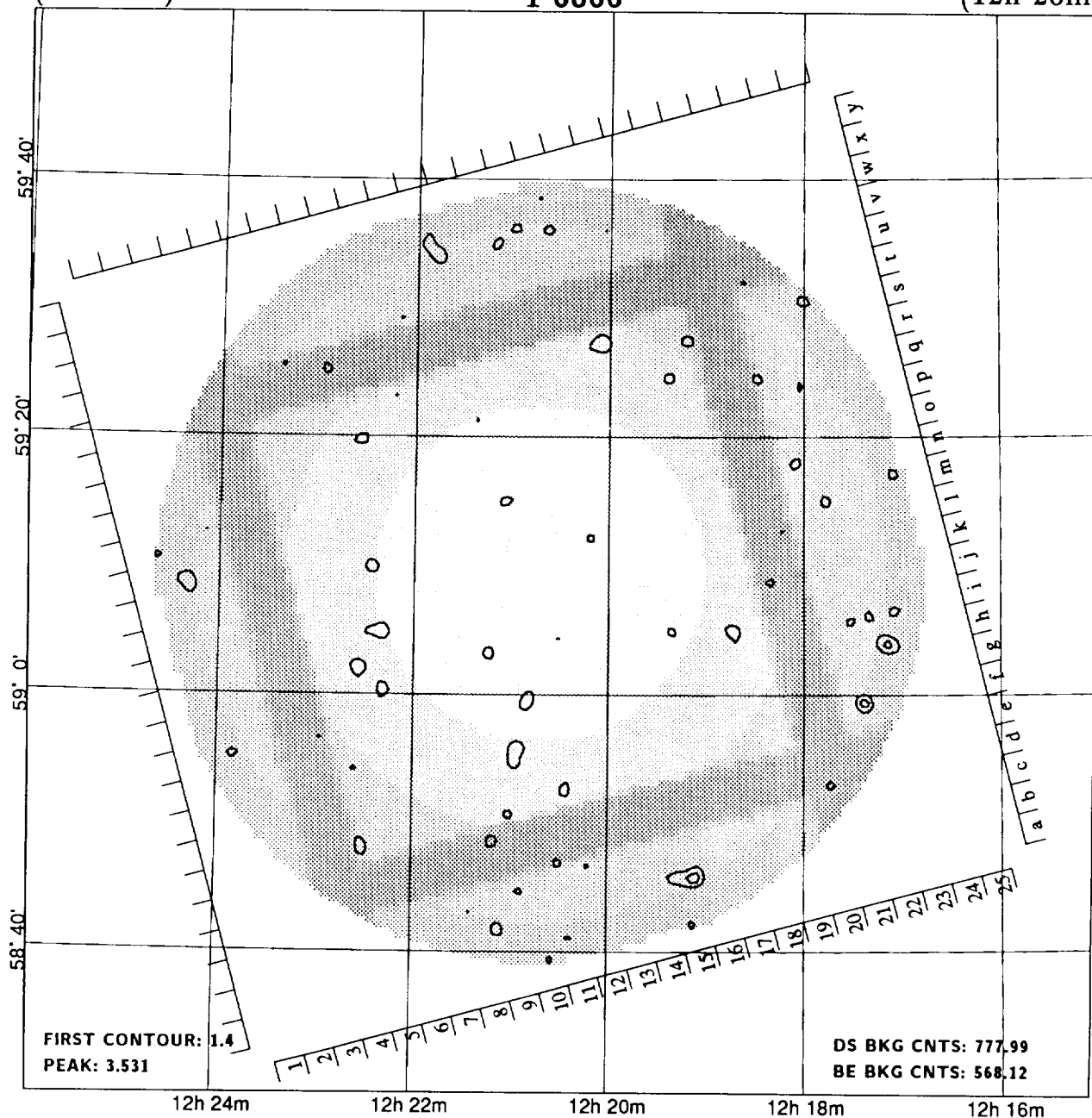
NH:  $2.4E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2668	1	12 18 29.6	16 11 26	57	0.0201	0.0057	15.7	4.3	3.5	1.0	0	26.9	H	
2684	2	12 20 23.8	16 05 52	36	0.0166	0.0039	23.4	7.6	4.2	1.0	0	1.9	H	G
2688	3	12 20 57.2	16 02 06	42	0.0279	0.0051	35.4	5.6	5.5	0.9	0	10.1	H	Q

(12h 20m)

I 6866

(12h 20m)



A1528, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $12^{\text{h}}20^{\text{m}}30.0^{\text{s}}$   $59^{\circ}10'59''$  (B1950)  
 $12^{\text{h}}22^{\text{m}}53.2^{\text{s}}$   $58^{\circ}54'22''$  (J2000)  
 $l: 129.86$   $b: 57.84$

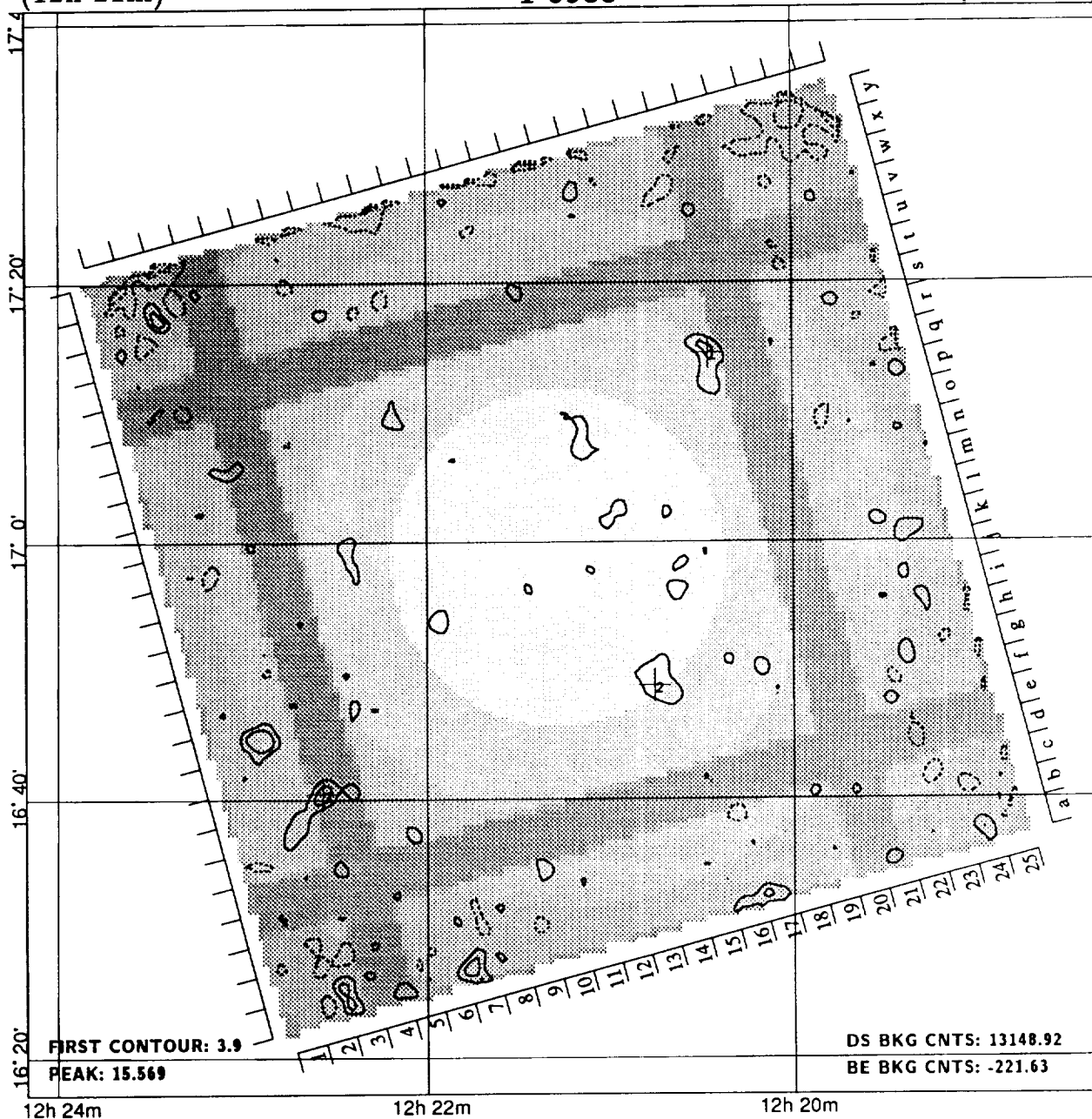
DATE: 1980/358 - 1980/358  
 LIVETIME: 630.4s  
 ROLL ANGLE:  $-105.1^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS:

(12h 21m)

I 6988

(12h 21m)



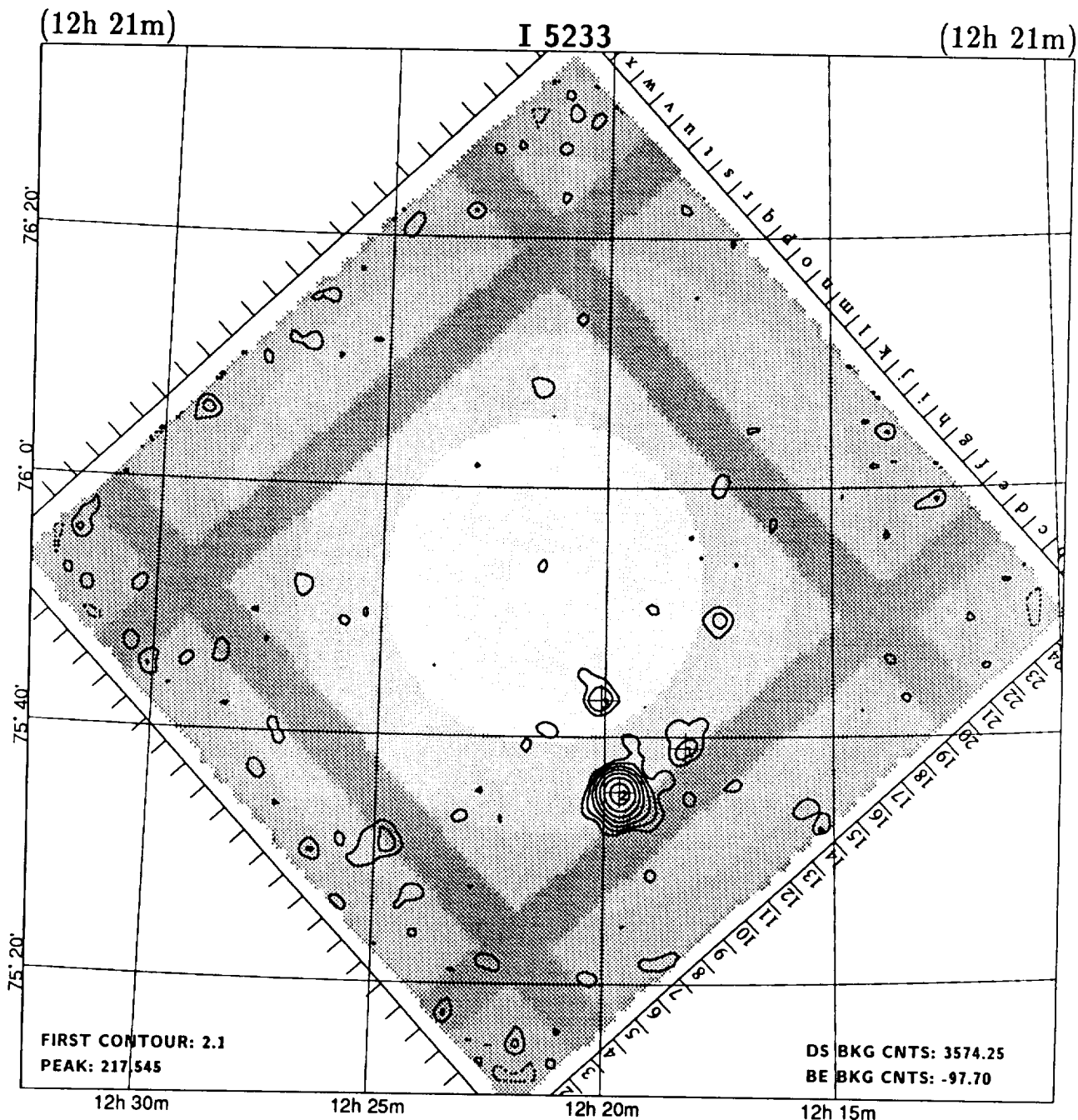
## NGC 4340/4350,VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 21^m 15.0^s$   $16^\circ 59' 13''$  (B1950)  
 $12^h 23^m 46.7^s$   $16^\circ 42' 35''$  (J2000)  
 $l: 269.95$   $b: 77.77$

DATE: 1981/ 10 - 1981/ 11  
 LIVETIME: 10654.9s  
 ROLL ANGLE:  $-104.9^\circ$

NH:  $2.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2685	1	12 20 27.6	17 14 34	59	*0.0045	0.0012	24.5	19.5	3.7	1.2	603	19.1	H
2686	2	12 20 45.3	16 48 49	53	0.0039	0.0011	26.6	26.4	3.7	1.3	0	12.3	H
2697	3	12 22 34.1	16 40 26	61	*0.0050	0.0014	21.9	16.1	3.6	1.2	1309	26.4	



QSO 1221+75W1, RADIO WEAK QUASARS

FIELD CENTER:  $12^h 21^m 21.3^s$   $75^\circ 53' 05''$  (B1950)  
 $12^h 23^m 29.3^s$   $75^\circ 36' 28''$  (J2000)  
 $l: 125.24$   $b: 41.39$

DATE: 1979/324 - 1979/324  
 LIVETIME: 2896.3s  
 ROLL ANGLE:  $-132.7^\circ$

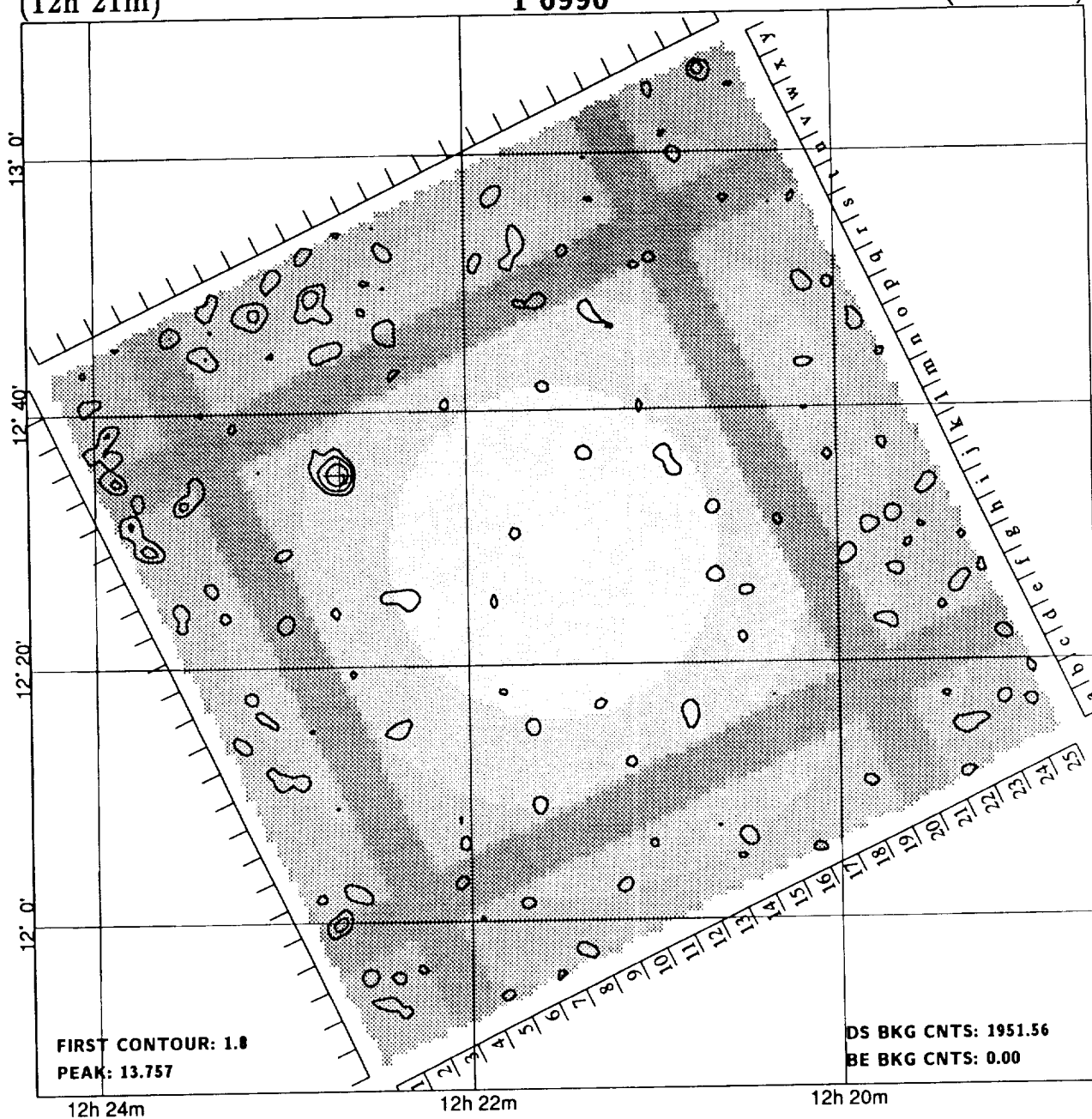
NH:  $3.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2665	1	12 18 13.8	75 39 07	55	*0.0130	0.0032	20.5	4.5	4.1	1.1	501	17.8	AH	G
2677	2	12 19 40.0	75 35 35	47	0.394	0.016	620.1	5.9	24.8	1.2	300	18.6	AH	Q
2681	3	12 20 04.9	75 42 55	42	0.0141	0.0031	26.9	7.1	4.6	0.9	0	11.0	AH	CLG

(12h 21m)

I 6990

(12h 21m)



## NGC 4351, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 21^m 29.4^s$   $12^\circ 28' 53''$  (B1950)  
 $12^h 24^m 01.7^s$   $12^\circ 12' 16''$  (J2000)  
 $l: 278.30$   $b: 73.75$

DATE: 1979/350 - 1979/350  
 LIVETIME: 1581.4s  
 ROLL ANGLE:  $-115.6^\circ$

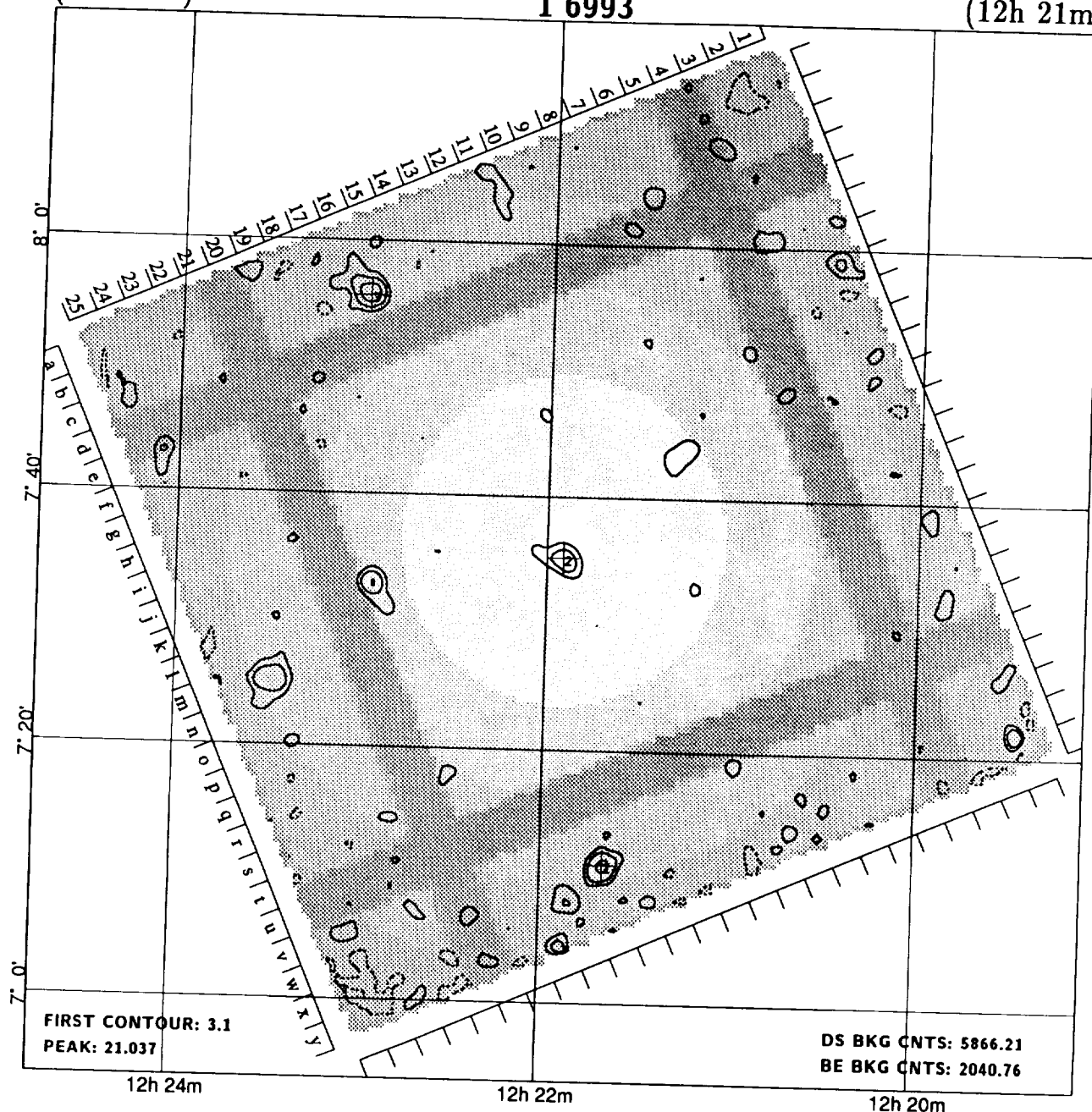
NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2698	1L	12 22 41.2	12 35 11	50	0.0335	0.0081	28.6	7.4	4.0	0.9	0	18.7	A	

(12h 21m)

I 6993

(12h 21m)



## NGC 4366/4370/4365, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 21^m 55.6^s$   $07^\circ 35' 41''$  (B1950)  
 $12^h 24^m 28.4^s$   $07^\circ 19' 04''$  (J2000)  
 $l: 283.81$   $b: 69.18$

DATE: 1980/178 - 1980/178  
 LIVETIME: 4753.6s  
 ROLL ANGLE:  $66.7^\circ$

NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS: L

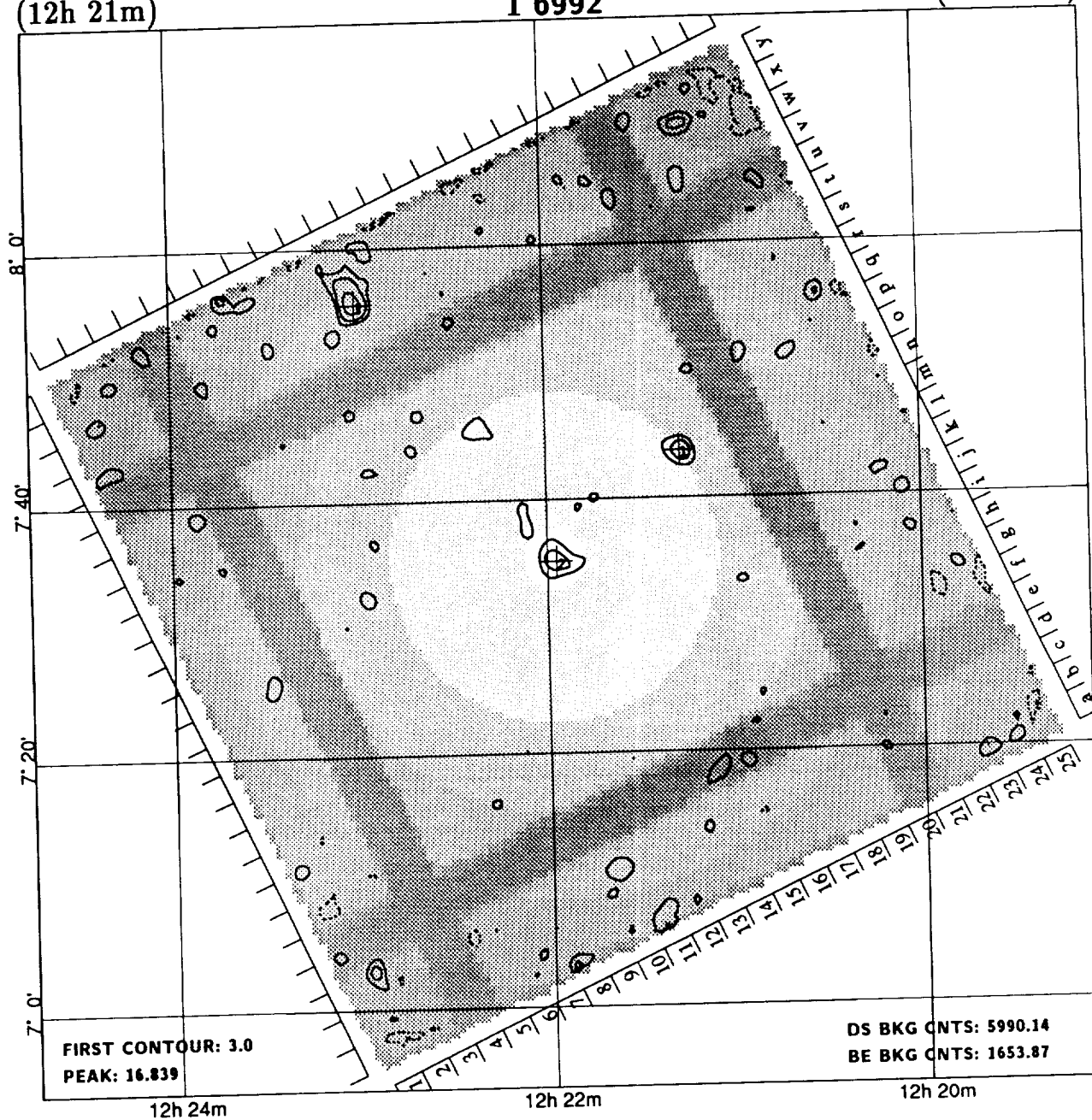
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2691	1L	12 21 39.7	07 10 53	51	0.0212	0.0041	41.9	8.1	5.0	0.9	0	24.8		
2694	2L	12 21 54.7	07 35 11	36	0.0105	0.0026	37.0	22.0	3.9	1.1	0	0.2	A	G
2701	3L	12 22 59.5	07 55 44	51	0.0183	0.0044	37.2	17.8	4.0	1.1	200	25.6	A	



(12h 21m)

I 6992

(12h 21m)



## NGC 4366/4370/4365, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 21^m 55.8^s$   $07^\circ 35' 41''$  (B1950)  
 $12^h 24^m 28.6^s$   $07^\circ 19' 04''$  (J2000)  
 $l: 283.81$   $b: 69.18$

DATE: 1979/349 - 1979/350  
 LIVETIME: 4854.0s  
 ROLL ANGLE:  $-115.1^\circ$

NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS: L

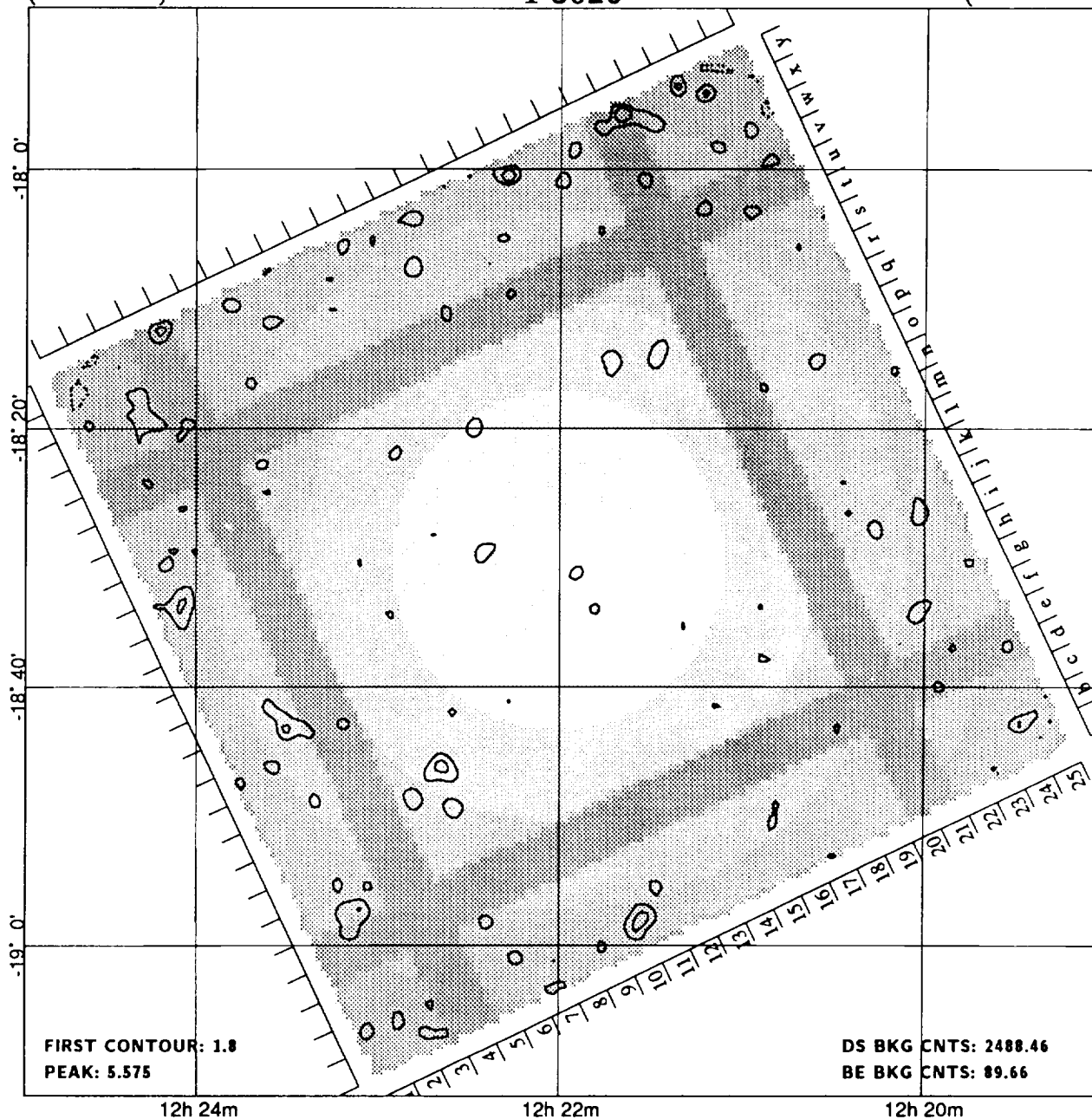
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2690	1L	12 21 16.9	07 43 45	42	0.0116	0.0027	35.0	12.0	4.2	0.7	0	12.4		
2694	2L	12 21 57.1	07 35 07	36	0.0105	0.0026	38.1	21.9	4.0	0.9	0	0.5	A	G
2701	3L	12 23 00.7	07 55 34	51	0.0185	0.0041	38.0	14.0	4.3	1.1	0	25.5	A	



(12h 21m)

I 3026

(12h 21m)

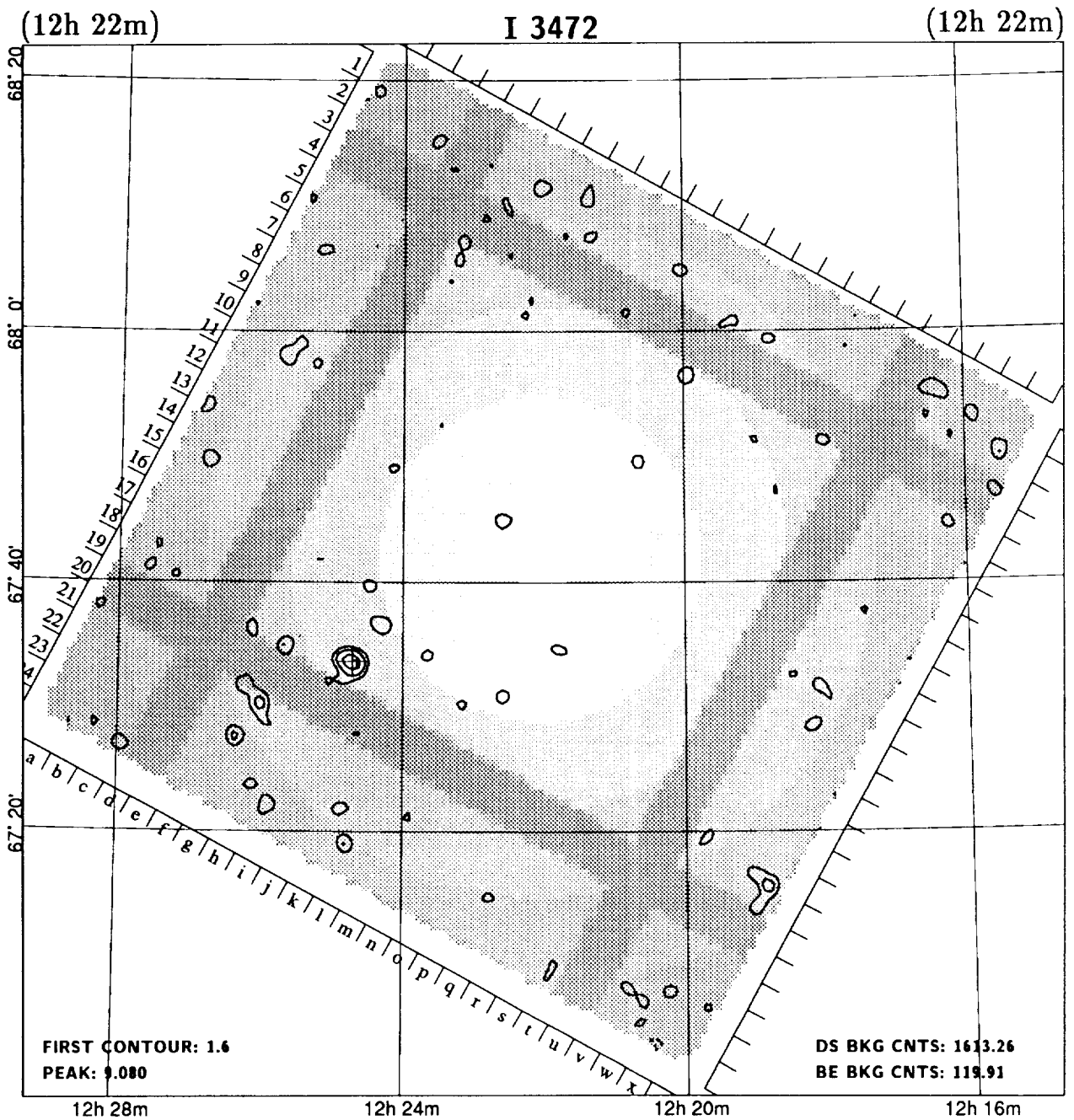


## NGC 4361: PLANETARY NEBULAE WITH HOT STARS

FIELD CENTER:  $12^{\text{h}}21^{\text{m}}59.0^{\text{s}}$   $-18^{\circ}29'40''$  (B1950)  
 $12^{\text{h}}24^{\text{m}}35.0^{\text{s}}$   $-18^{\circ}46'17''$  (J2000)  
 $l: 294.13$   $b: 43.64$

DATE: 1980/ 8 - 1980/ 8  
 LIVETIME: 2016.5s  
 ROLL ANGLE:  $-115.5^{\circ}$

NH:  $3.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



**MKN 206, SEYFERT AND ACTIVE NUCLEI GALAXIES**

FIELD CENTER: 12<sup>h</sup>22<sup>m</sup>00.0<sup>s</sup> 67°40'59" (B1950)  
 12<sup>h</sup>24<sup>m</sup>17.4<sup>s</sup> 67°24'22" (J2000)  
 $l$ : 126.94  $b$ : 49.51

DATE: 1979/118 - 1979/118  
 LIVETIME: 1307.3s  
 ROLL ANGLE: 28.6°

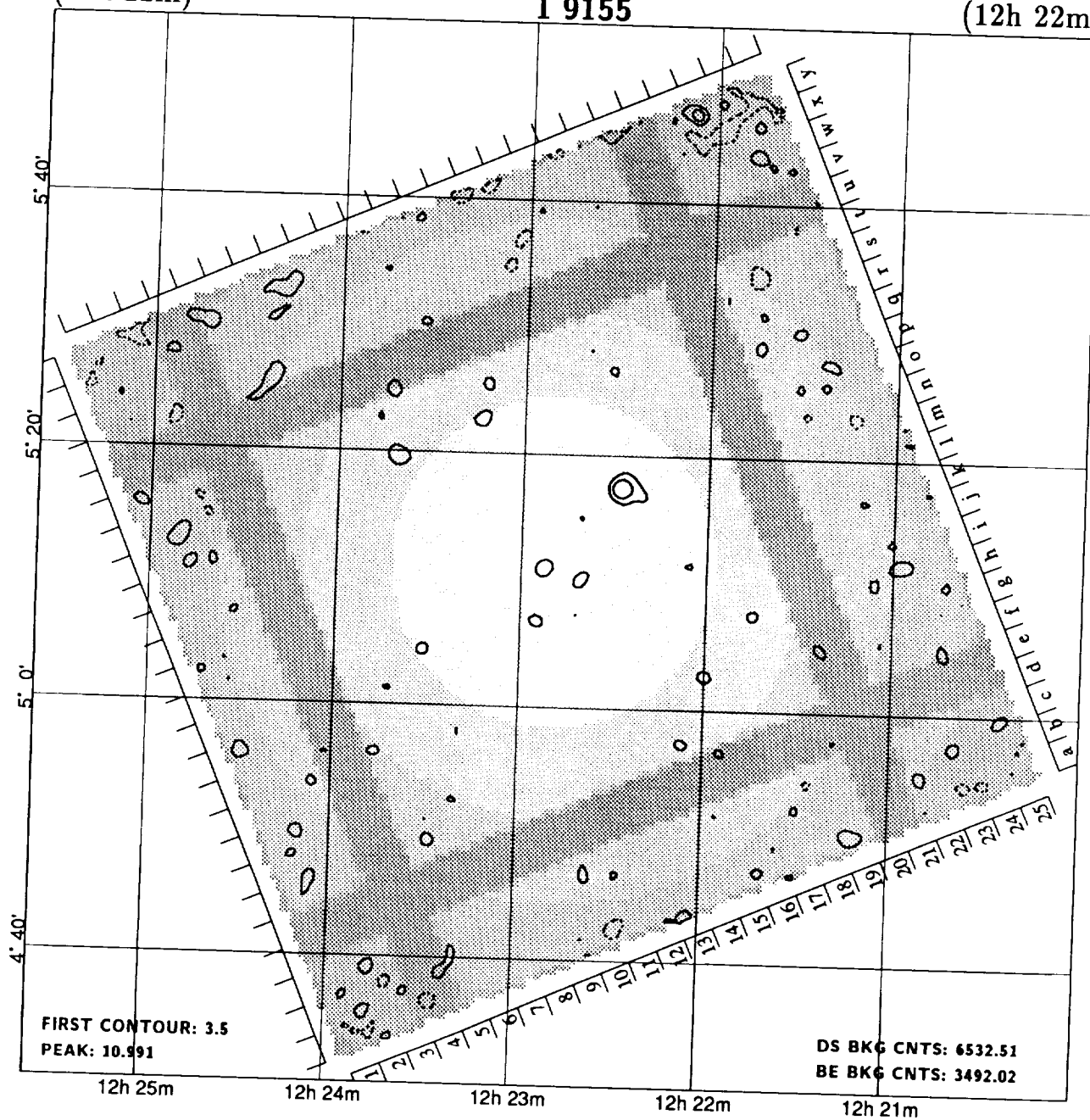
NH: 2.0E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2710	1	12 24 42.6	67 33 42	51	0.0303	0.0069	22.0	3.0	4.4	0.8	100	17.1	H	

(12h 22m)

I 9155

(12h 22m)



EMISSION BY S<sub>a</sub> GALAXIES: NGC 4378

FIELD CENTER:  $12^{\text{h}}22^{\text{m}}48.0^{\text{s}}$   $05^{\circ}11'59''$  (B1950)  
 $12^{\text{h}}25^{\text{m}}21.1^{\text{s}}$   $04^{\circ}55'23''$  (J2000)  
 $l: 286.14$   $b: 66.94$

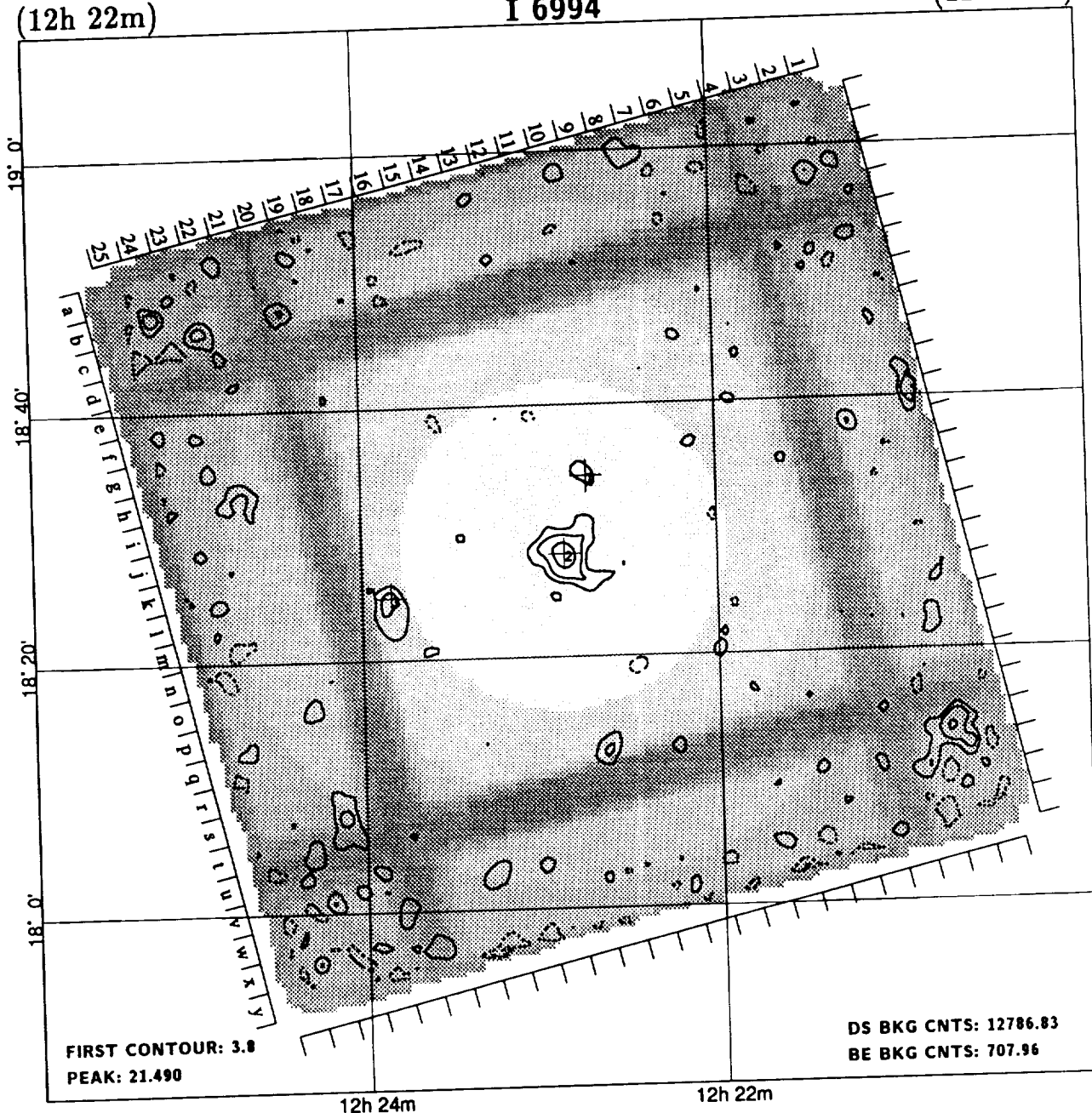
DATE: 1980/347 - 1980/347  
LIVETIME: 5293.6s  
ROLL ANGLE:  $-113.1^{\circ}$

NH:  $1.7\text{E}+20$   
REF/ID:  
FIELD FLAGS: L

(12h 22m)

I 6994

(12h 22m)



## NGC 4382/4394, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}22^{\text{m}}52.8^{\text{s}}$   $18^{\circ}27'59''$  (B1950)  
 $12^{\text{h}}25^{\text{m}}24.2^{\text{s}}$   $18^{\circ}11'23''$  (J2000)  
 $l: 267.72$   $b: 79.24$

DATE: 1980/179 - 1980/180  
 LIVETIME: 10361.5s  
 ROLL ANGLE:  $76.4^{\circ}$

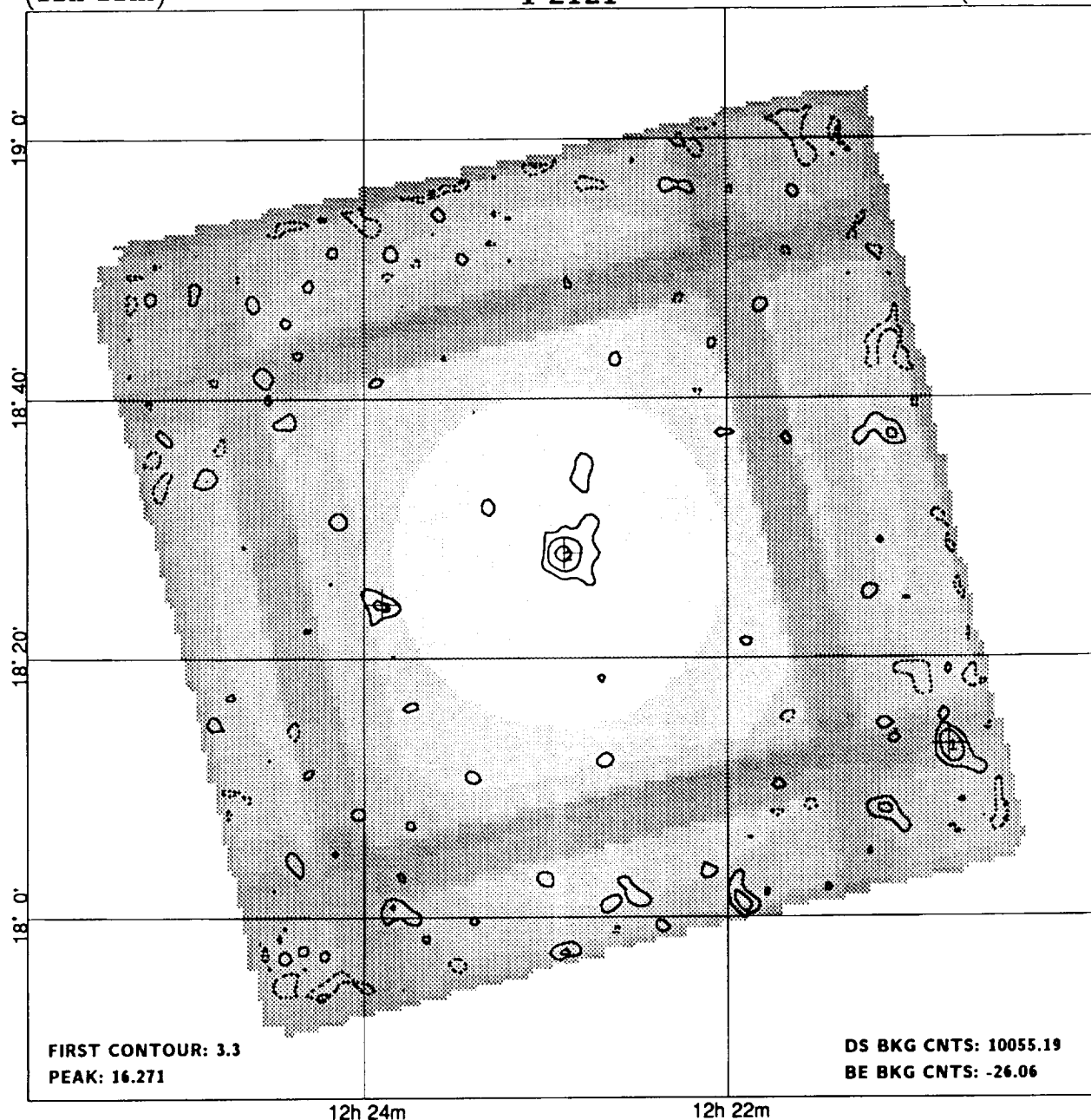
NH:  $2.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2699	1L	12 22 43.8	18 34 16	47	0.0048	0.0013	35.2	23.8	3.7	0.5	0	6.6		
2700	2	12 22 51.7	18 28 10	32	0.0128	0.0015	99.1	32.9	8.6	1.6	0	0.4	AH	G
2708	3	12 23 50.2	18 24 56	43	0.0047	0.0012	29.2	24.8	4.0	1.1	200	13.9	AH	

(12h 22m)

I 2121

(12h 22m)



## X-RAY SURVEY OF NORMAL GALAXIES: NGC4382

FIELD CENTER:  $12^{\text{h}}22^{\text{m}}54.0^{\text{s}}$   $18^{\circ}27'59''$  (B1950)  
 $12^{\text{h}}25^{\text{m}}25.4^{\text{s}}$   $18^{\circ}11'23''$  (J2000)  
 $l: 267.74$   $b: 79.24$

DATE: 1979/180 - 1981/ 16  
 LIVETIME: 8148.0s

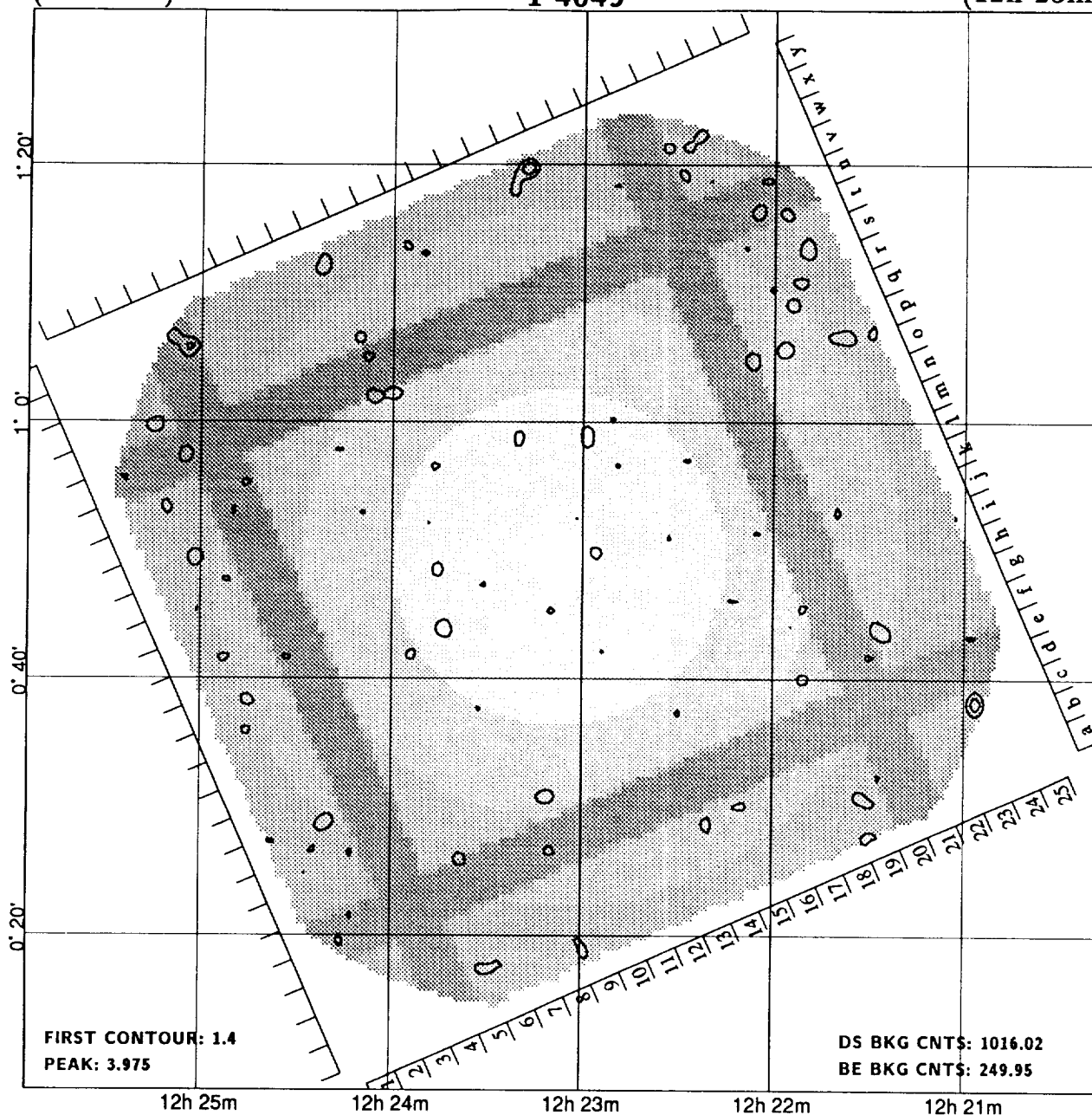
NH:  $2.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2687	1	12 20 47.5	18 13 13	62	*0.0079	0.0022	19.0	10.0	3.5	1.0	1609	33.5		
2700	2	12 22 53.8	18 28 07	35	0.0107	0.0016	65.2	24.8	6.9	1.4	0	0.2	AH	G
2708	3	12 23 54.1	18 24 07	47	0.0050	0.0014	24.5	20.5	3.7	0.8	0	14.8	A	

(12h 23m)

I 4049

(12h 23m)



FIELD CENTER:  $12^h 23^m 06.0^s$   $00^\circ 49' 59''$  (B1950)  
 $12^h 25^m 39.6^s$   $00^\circ 33' 23''$  (J2000)  
 $l: 288.76$   $b: 62.72$

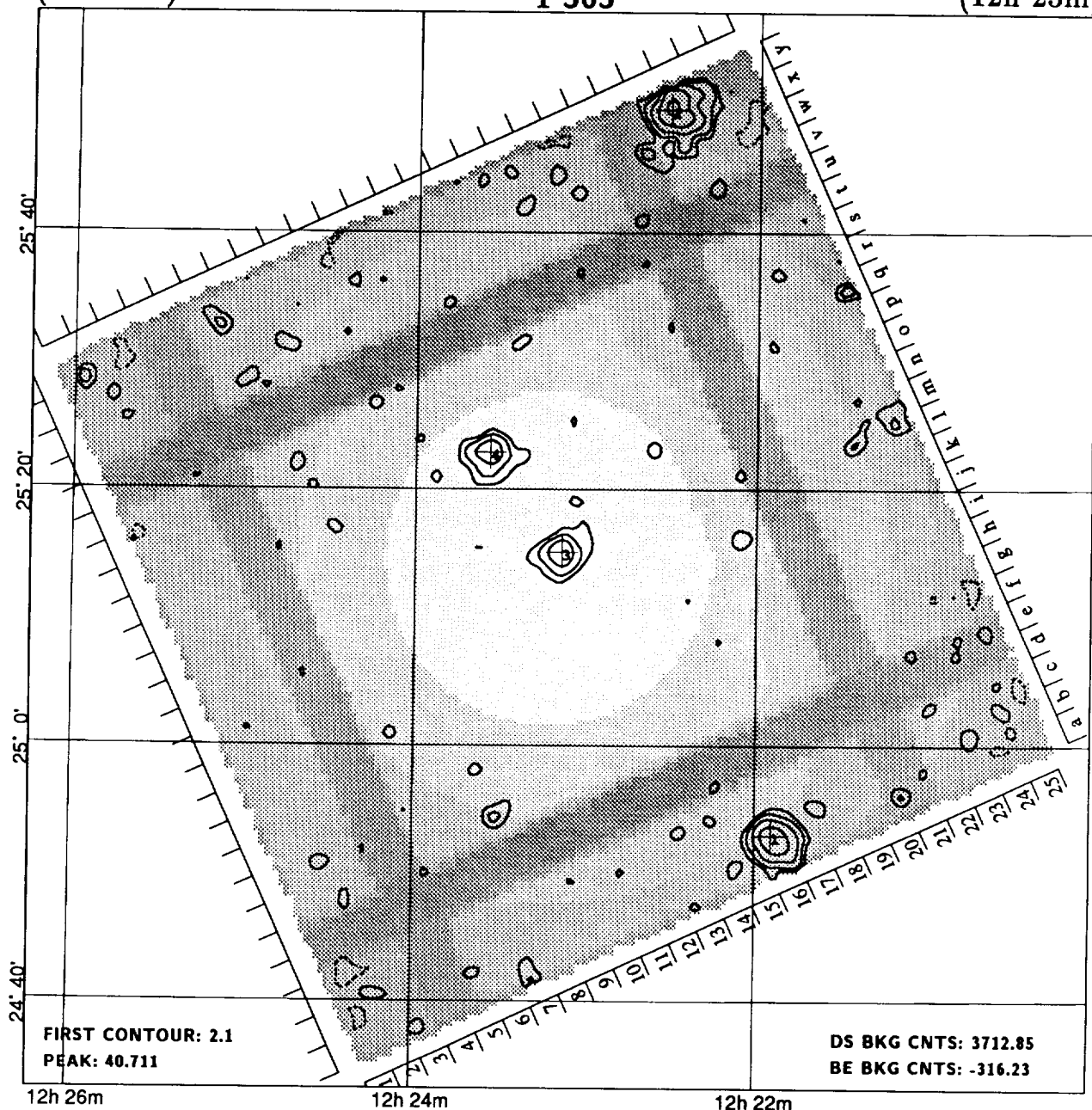
DATE: 1979/354 - 1979/354  
 LIVETIME: 823.3s  
 ROLL ANGLE:  $-113.8^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 23m)

I 565

(12h 23m)



## QSO 1223+252 (4C 25.40) QUASAR SURVEY

FIELD CENTER:  $12^h 23^m 09.1^s$   $25^\circ 15' 11''$  (B1950)  
 $12^h 25^m 39.5^s$   $24^\circ 58' 35''$  (J2000)  
 $l: 231.88$   $b: 83.82$

DATE: 1978/354 - 1978/354  
 LIVETIME: 3008.6s  
 ROLL ANGLE:  $-114.6^\circ$

NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

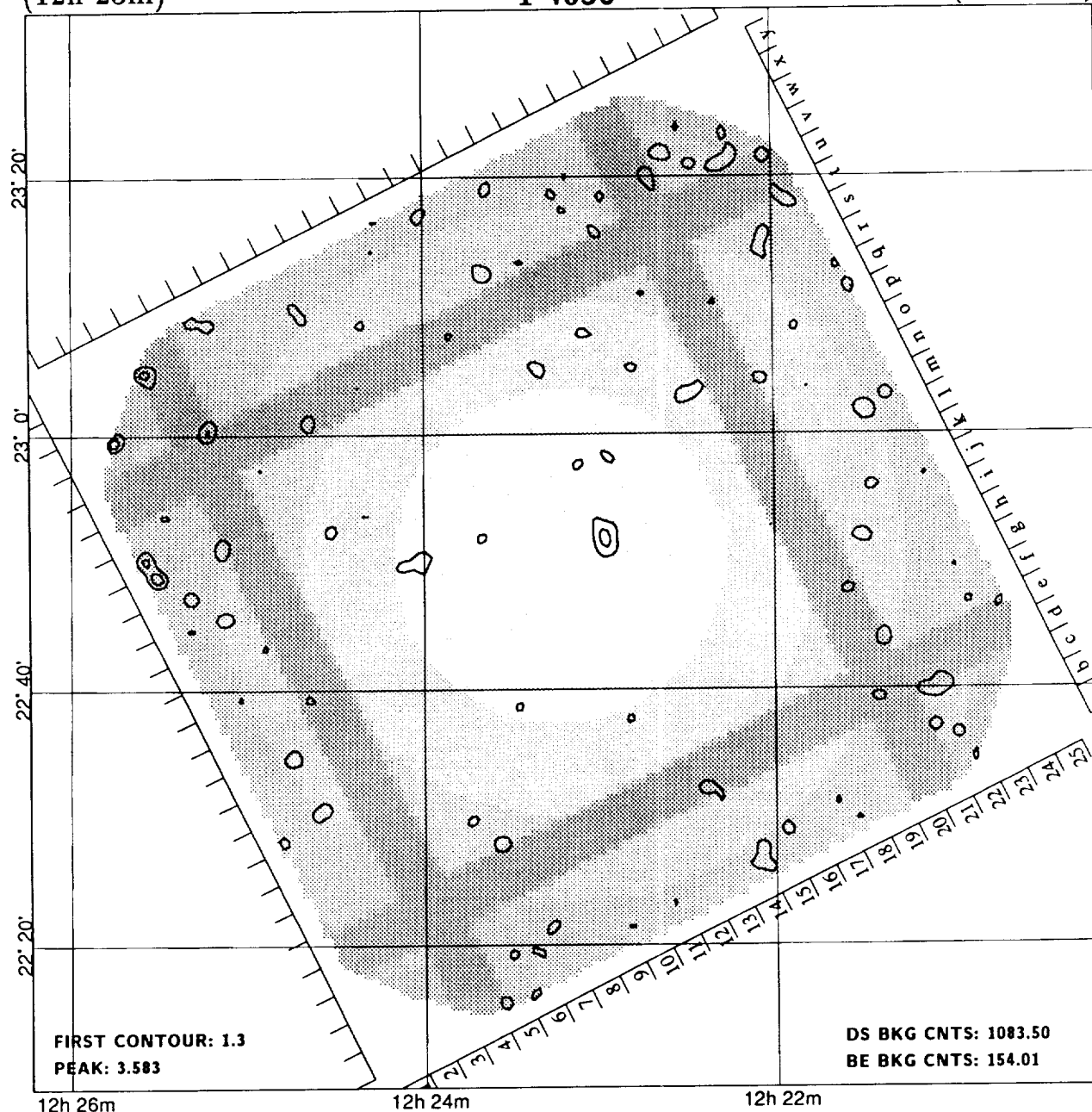
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2693	1	12 21 54.2	24 52 59	50	0.0557	0.0072	64.4	5.6	7.7	1.4	0	28.1	H	
2695	2	12 22 31.4	25 49 37	50	0.070	0.010	53.2	4.8	7.0	1.6	200	35.5	H	S
2702	3	12 23 08.3	25 15 04	35	0.0273	0.0037	61.3	8.7	7.3	1.2	0	0.2	H	Q
2705	4	12 23 33.8	25 22 54	41	0.0249	0.0038	50.4	7.6	6.6	1.3	0	9.7	H	AGN



(12h 23m)

I 4056

(12h 23m)



## HIGH REDSHIFT QUASAR

FIELD CENTER:  $12^h 23^m 12.0^s$   $22^\circ 50' 59''$  (B1950)  
 $12^h 25^m 42.7^s$   $22^\circ 34' 23''$  (J2000)  
 $l: 249.51$   $b: 82.60$

DATE: 1979/349 - 1979/349  
 LIVETIME: 878.0s  
 ROLL ANGLE:  $-116.4^\circ$

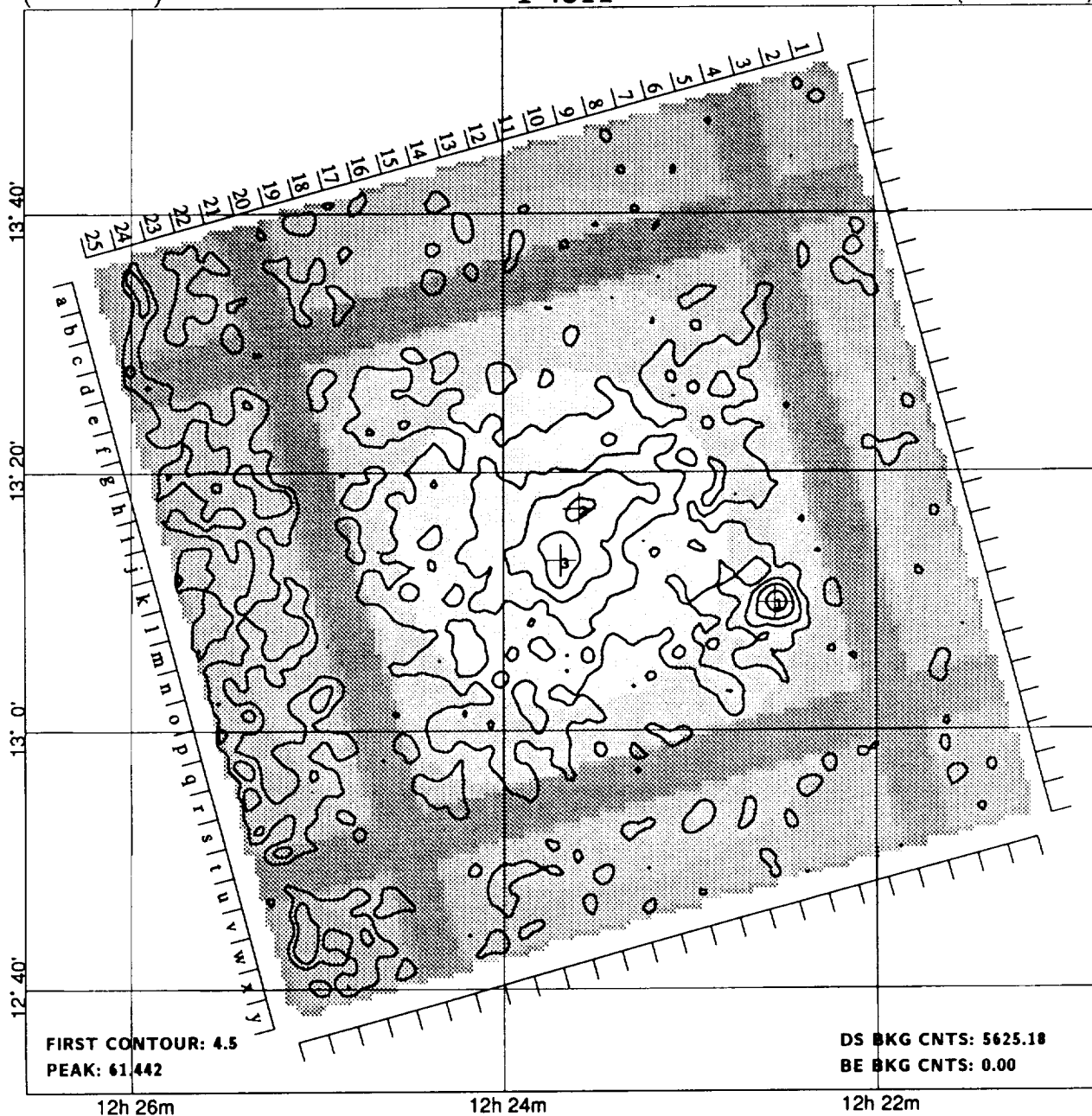
NH:  $1.8E+20$   
 REF/ID: !  
 FIELD FLAGS:



(12h 23m)

I 4311

(12h 23m)



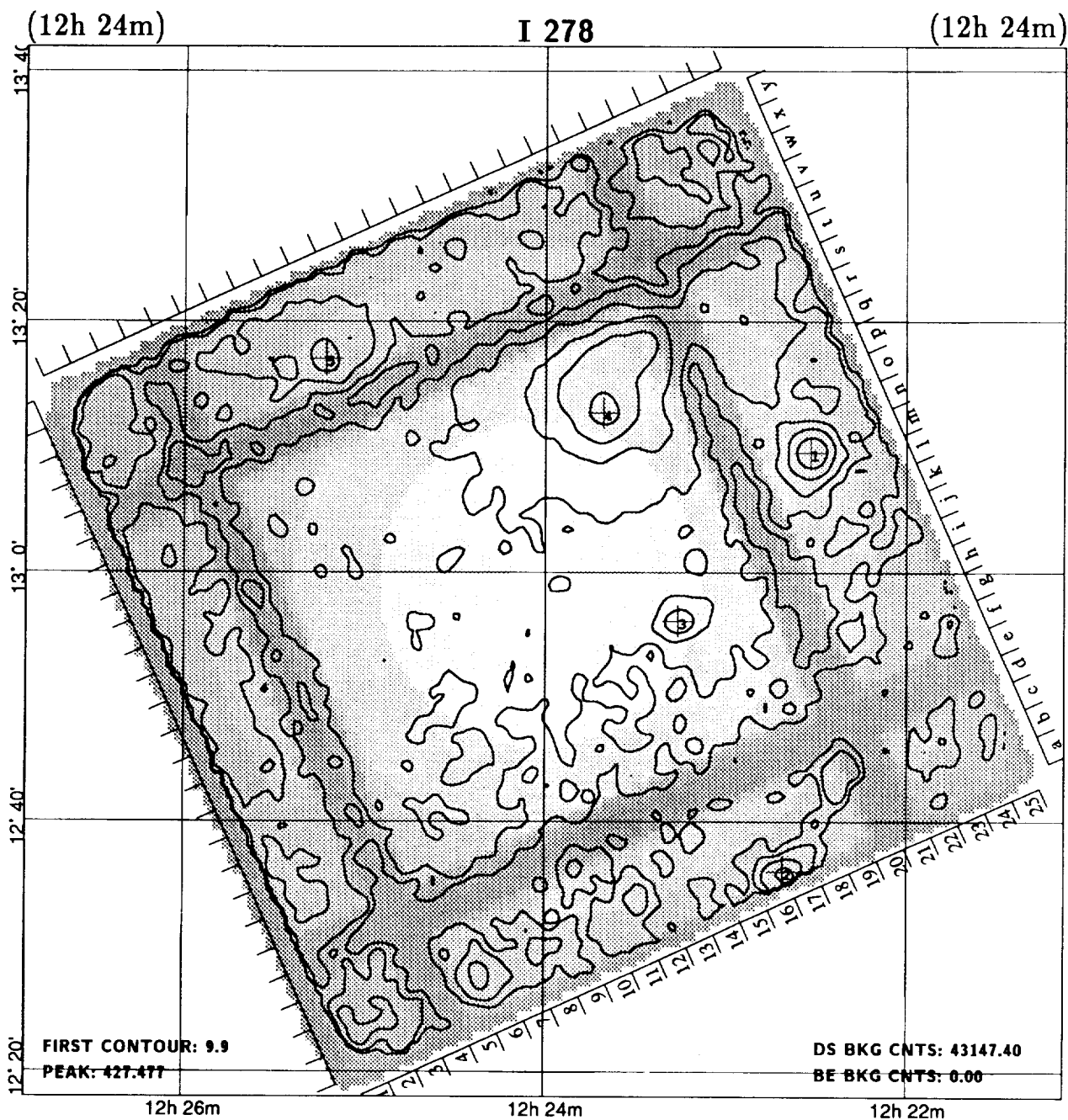
VIRGO CLUSTER FOLLOW-UP: M 86 = NGC 4406

FIELD CENTER:  $12^{\text{h}}23^{\text{m}}42.0^{\text{s}}$   $13^{\circ}13'59''$  (B1950)  
 $12^{\text{h}}26^{\text{m}}14.0^{\text{s}}$   $12^{\circ}57'23''$  (J2000)  
 $l: 279.10$   $b: 74.65$

DATE: 1979/183 - 1979/183  
 LIVETIME: 4558.2s  
 ROLL ANGLE:  $74.8^{\circ}$

NH:  $2.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2696	1L	12 22 32.4	13 09 54	48	0.0539	0.0060	136.3	33.7	8.9	26.0	0	17.5	A	G
2706	2L	12 23 35.5	13 17 08	31	0.0256	0.0057	85.6	140.4	4.4	23.8	0	3.2	A	G
2707	3L	12 23 41.5	13 13 07	31	0.0333	0.0067	112.1	200.9	4.9	16.5	0	0.8	A	G



**M84 VIRGO CLUSTER IMAGE**

FIELD CENTER:  $12^h 24^m 00.0^s$   $12^\circ 59' 59''$  (B1950)  
 $12^h 26^m 32.0^s$   $12^\circ 43' 23''$  (J2000)  
 $l$ : 279.68  $b$ : 74.46

DATE: 1978/355 - 1978/356  
 LIVETIME: 34963.8s  
 ROLL ANGLE:  $-114.2^\circ$

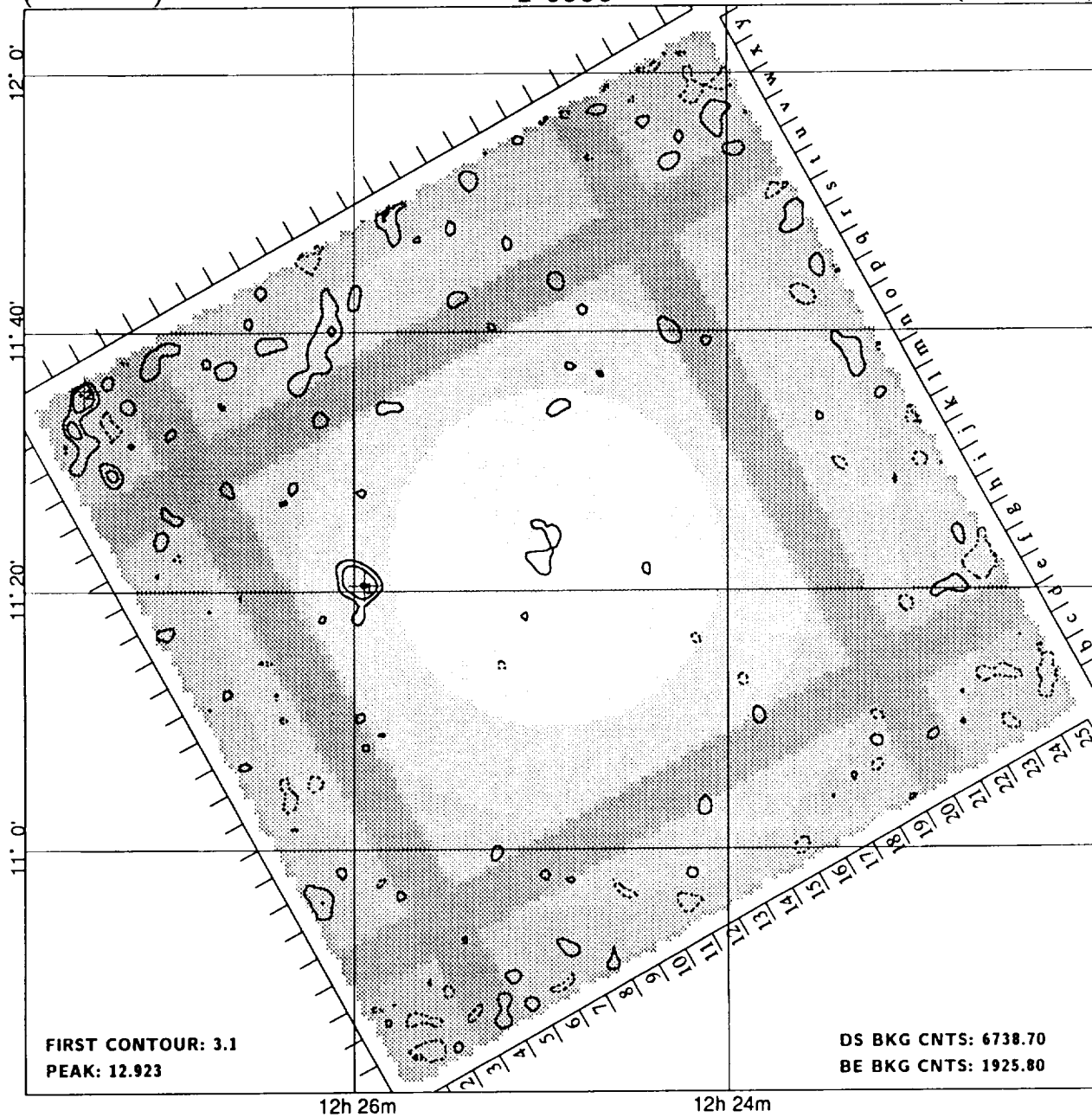
NH:  $2.6E+20$   
 REF/ID: G  
 FIELD FLAGS: DL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2696	1L	12 22 31.8	13 09 35	47	0.0359	0.0023	557.4	306.6	15.7	61.8	0	23.5	A	G
2698	2L	12 22 40.9	12 35 57	53	*0.0096	0.0018	131.5	128.2	5.5	2.4	702	30.8	AI	
2703	3L	12 23 15.7	12 56 07	38	0.0136	0.0013	307.1	262.9	10.4	148.5	0	11.3		G
2707	4L	12 23 40.7	13 12 48	37	0.0337	0.0026	705.0	1113.0	13.0	34.7	0	13.8	A	G
2718	5L	12 25 13.2	13 17 05	48	0.0115	0.0017	172.7	222.3	6.8	136.1	0	24.9		G

(12h 24m)

I 6999

(12h 24m)



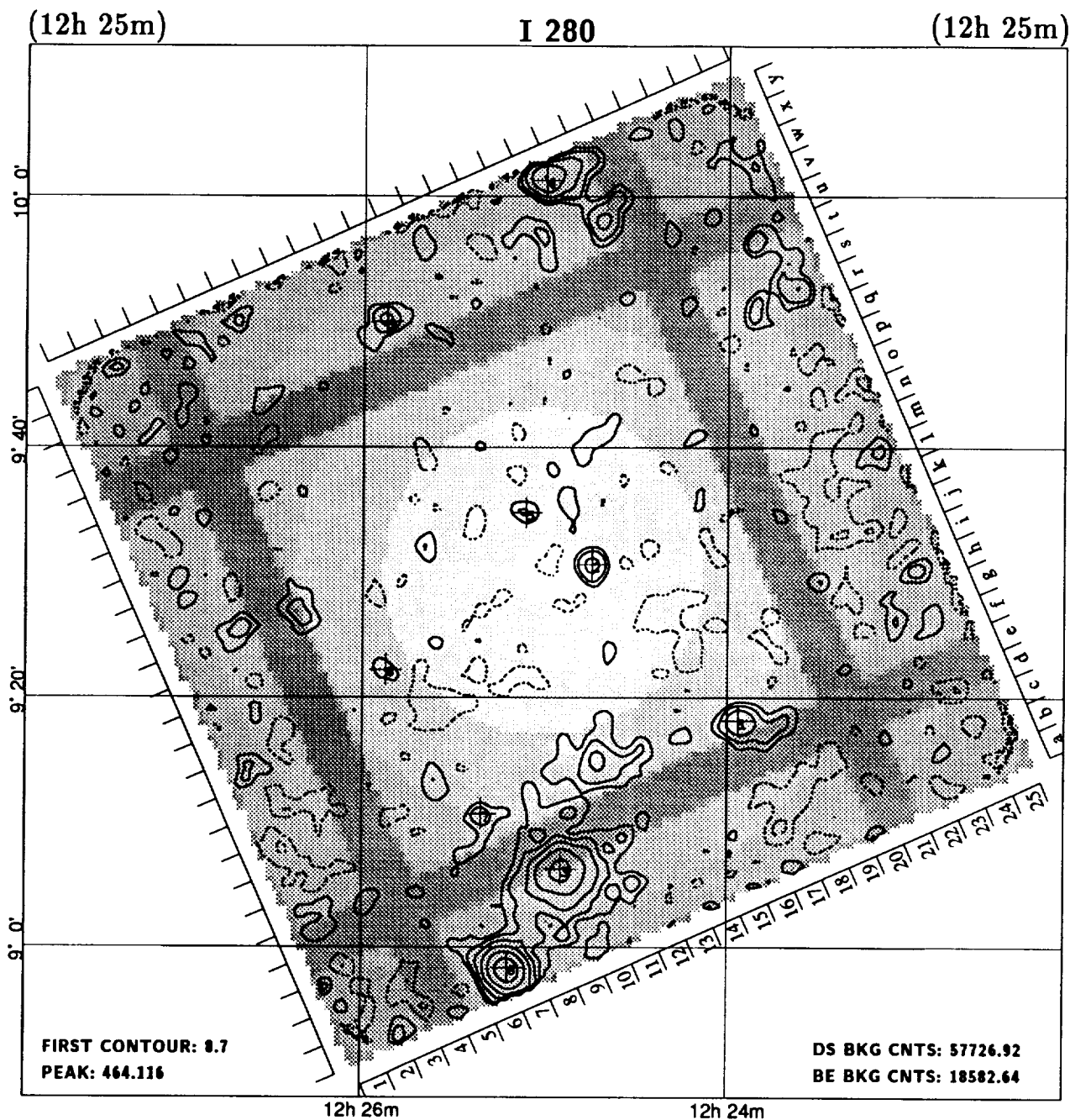
NGC 4429, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}24^{\text{m}}54.0^{\text{s}}$   $11^{\circ}23'05''$  (B1950)  
 $12^{\text{h}}27^{\text{m}}26.2^{\text{s}}$   $11^{\circ}06'30''$  (J2000)  
 $\ell: 282.38$   $b: 73.02$

DATE: 1981/ 10 - 1981/ 10  
 LIVETIME: 5460.6s  
 ROLL ANGLE:  $-119.1^{\circ}$

NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2726	1	12 25 56.6	11 20 27	51	0.0134	0.0024	43.0	16.0	5.6	1.0	0	15.8	H	
2737	2	12 27 26.2	11 35 36	57	*0.0234	0.0064	20.5	10.5	3.7	2.1	704	39.5	EH	



NGC 4472 VIRGO CLUSTER IMAGE

FIELD CENTER: 12<sup>h</sup>25<sup>m</sup>00.0<sup>s</sup> 09°29'59" (B1950)  
12<sup>h</sup>27<sup>m</sup>32.5<sup>s</sup> 09°13'24" (J2000)  
 $l$ : 284.32  $b$ : 71.23

DATE: 1978/358 - 1978/359  
LIVETIME: 46778.1s  
ROLL ANGLE: -113.8°

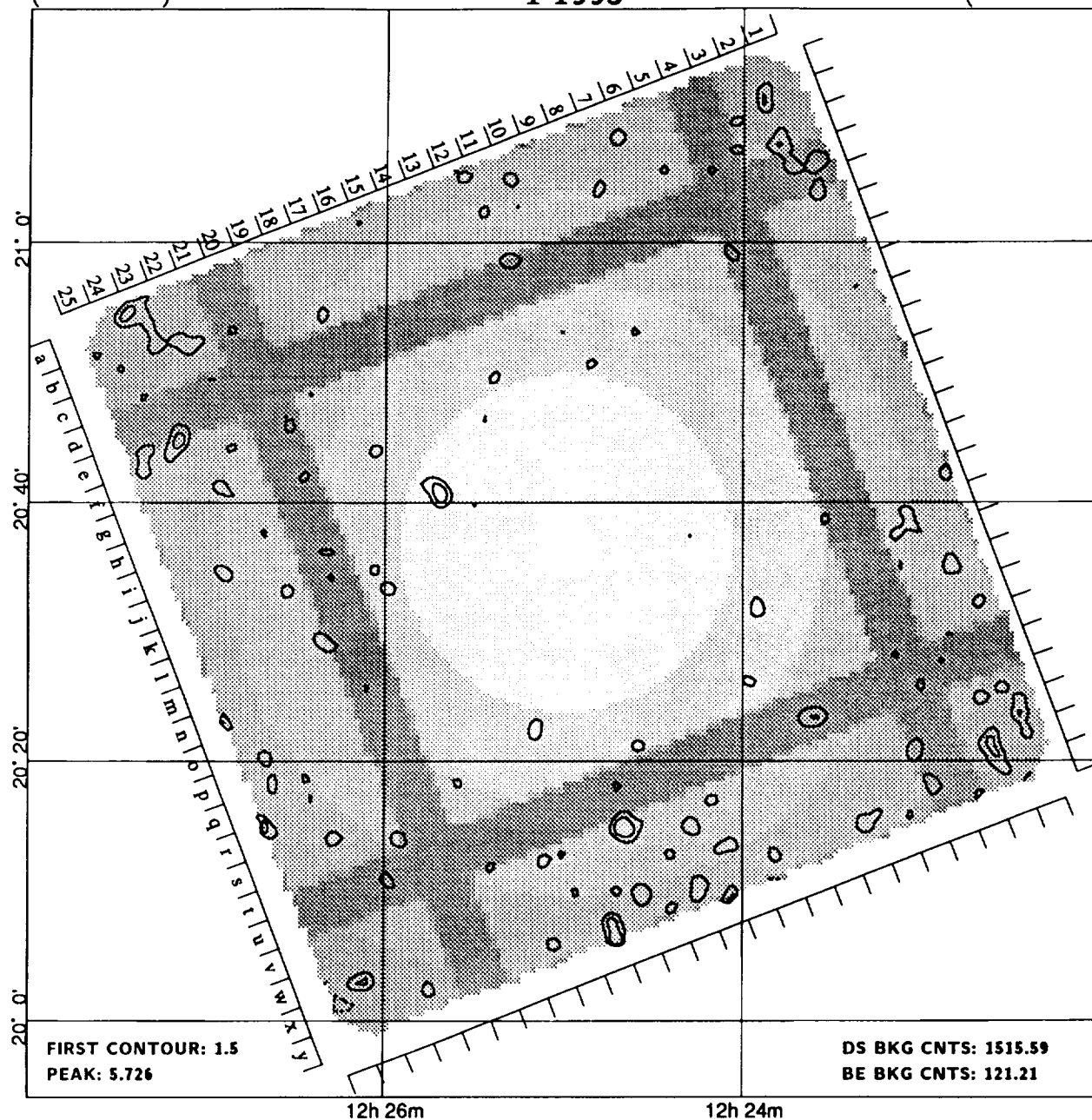
NH: 1.8E+20  
REF/ID:  
FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2709	1L	12 23 56.4	09 18 07	48	*0.0077	0.0011	184.1	154.0	7.0	1.5	502	19.8		
2713	2L	12 24 44.6	09 30 41	31	0.00599	0.00071	202.7	177.3	8.4	0.9	0	4.0		Q
2714	3L	12 24 54.5	09 06 15	47	*0.0136	0.0022	284.1	332.4	6.0	5.7	905	23.8		
2715	4L	12 25 00.2	10 01 17	48	0.0132	0.0017	199.1	197.9	7.6	1.9	500	31.3		S
2716	5L	12 25 06.4	09 34 48	41	0.00313	0.00063	104.6	169.4	4.9	0.6	0	5.1		
2717	6L	12 25 12.0	08 58 22	47	0.0475	0.0024	712.1	219.9	19.8	2.6	100	31.7		Q
2719	7L	12 25 20.9	09 10 38	50	0.00362	0.00078	86.3	129.7	4.6	1.2	0	19.9		S
2724	8L	12 25 52.4	09 22 16	56	0.00296	0.00068	81.8	136.2	4.3	0.5	0	15.1		
2725	9L	12 25 52.4	09 50 00	51	0.00404	0.00088	85.1	129.9	4.5	1.0	200	23.6		

(12h 25m)

I 1995

(12h 25m)



## X-RAY STUDY OF BL LAC OBJECTS: 4C20.29

FIELD CENTER:  $12^{\text{h}}25^{\text{m}}00.0^{\text{s}}$   $20^{\circ}35'59''$  (B1950)  
 $12^{\text{h}}27^{\text{m}}30.9^{\text{s}}$   $20^{\circ}19'24''$  (J2000)  
 $l$ : 262.86  $b$ : 81.27

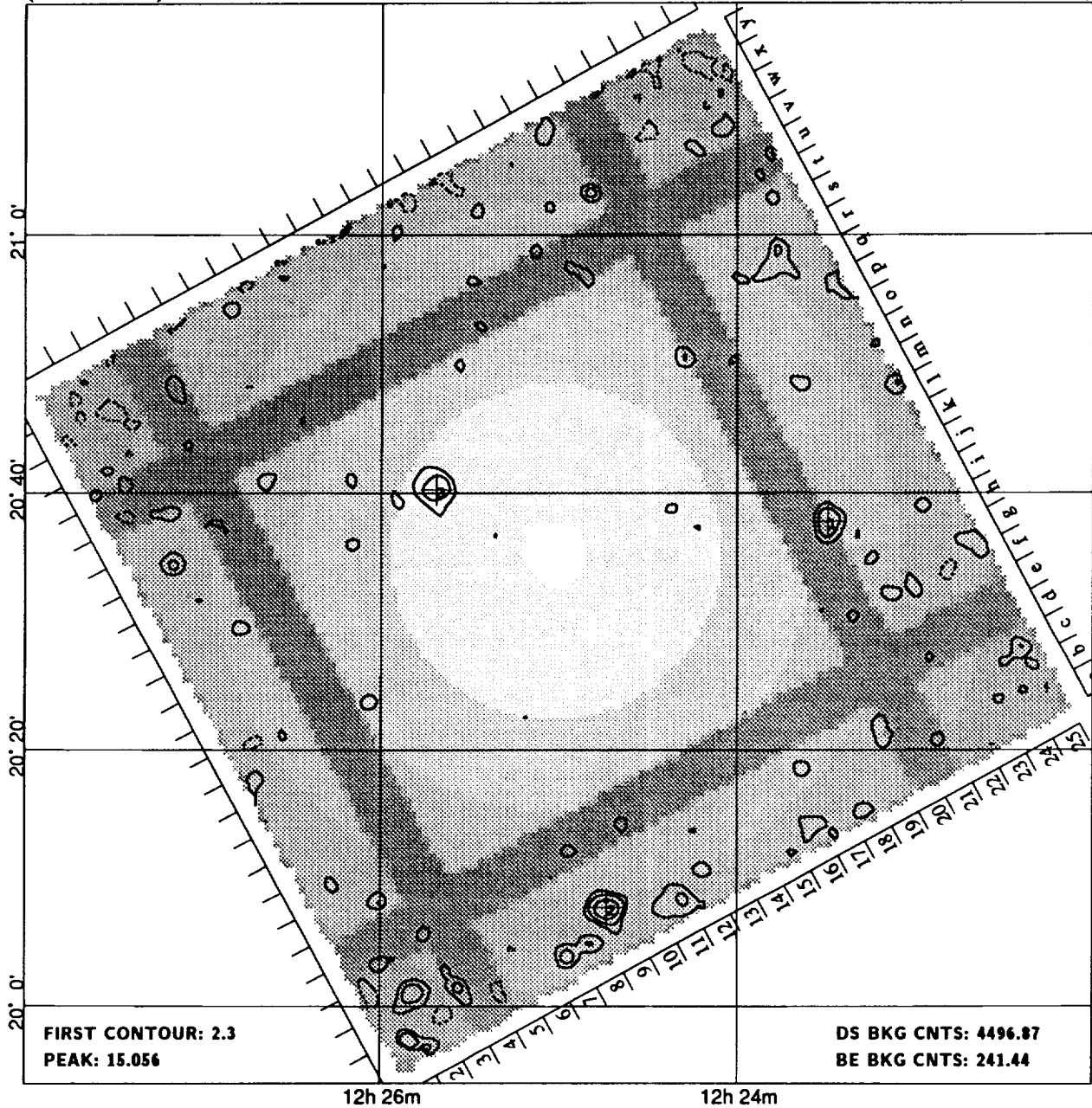
DATE: 1979/181 - 1979/181  
 LIVETIME: 1228.1s  
 ROLL ANGLE:  $69.0^{\circ}$

NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

(12h 25m)

I 1996

(12h 25m)



## X-RAY STUDY OF BL LAC OBJECTS: 4C20.29

FIELD CENTER:  $12^{\text{h}}25^{\text{m}}00.0^{\text{s}}$   $20^{\circ}35'59''$  (B1950)  
 $12^{\text{h}}27^{\text{m}}30.9^{\text{s}}$   $20^{\circ}19'24''$  (J2000)  
 $l: 262.86$   $b: 81.27$

DATE: 1979/349 - 1979/349  
 LIVETIME: 3644.0s  
 ROLL ANGLE:  $-118.5^{\circ}$

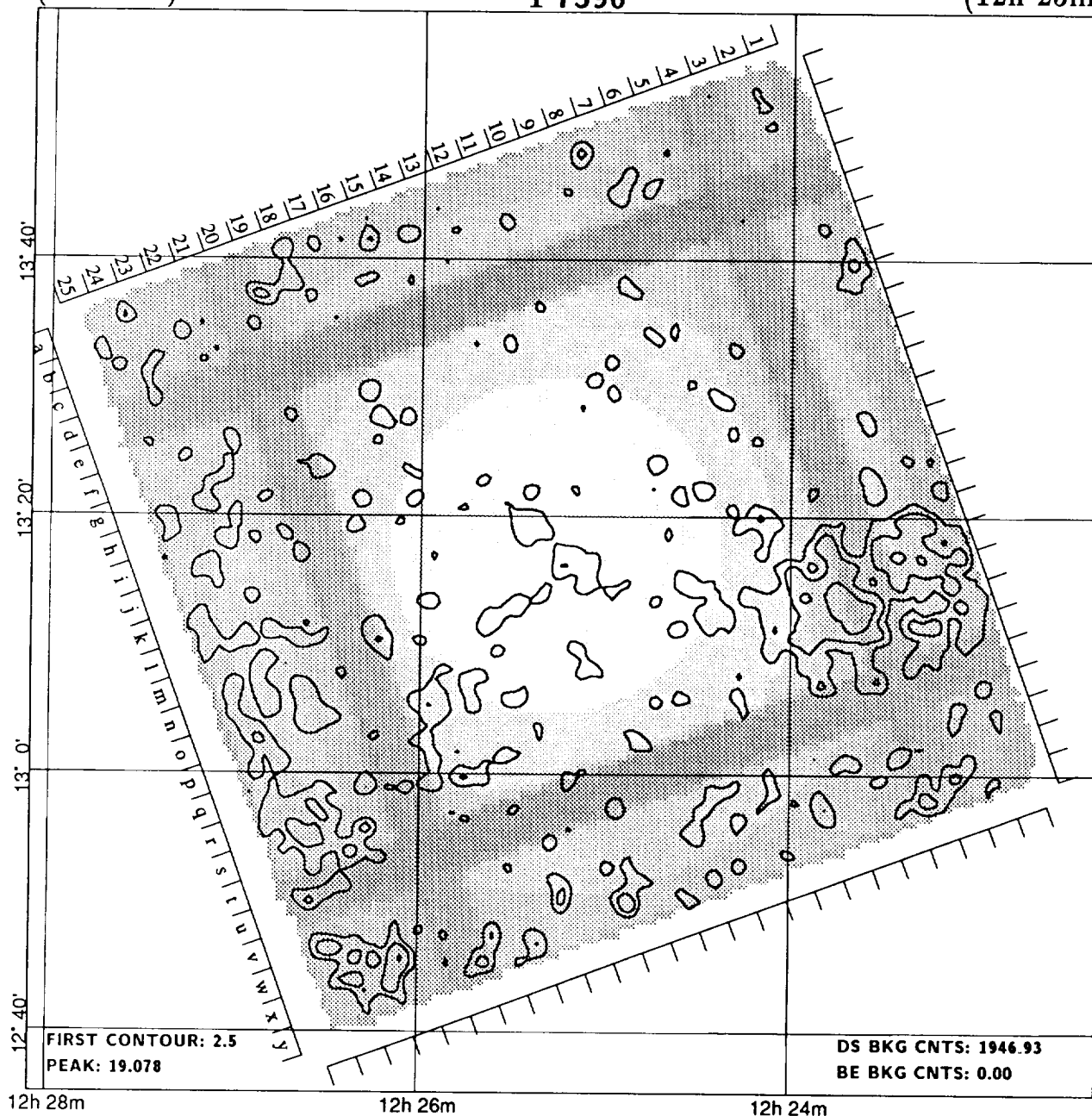
NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2704	1	12 23 29.5	20 37 47	55	*0.0115	0.0029	20.4	6.6	3.9	0.8	905	21.3		
2711	2	12 24 43.8	20 07 44	51	0.0214	0.0044	29.9	7.1	4.9	0.9	0	28.4	H	
2721	3	12 25 41.4	20 40 15	42	0.0110	0.0026	26.4	11.6	4.3	1.0	0	10.9	H	

(12h 25m)

I 7590

(12h 25m)



## N 4438, NEW SEYFERT 1 GALAXIES

FIELD CENTER:  $12^h 25^m 13.5^s$   $13^\circ 17' 10''$  (B1950)  
 $12^h 27^m 45.4^s$   $13^\circ 00' 35''$  (J2000)  
 $\ell$ : 280.34  $b$ : 74.83

DATE: 1980/190 - 1980/190  
 LIVETIME: 1577.6s  
 ROLL ANGLE:  $69.9^\circ$

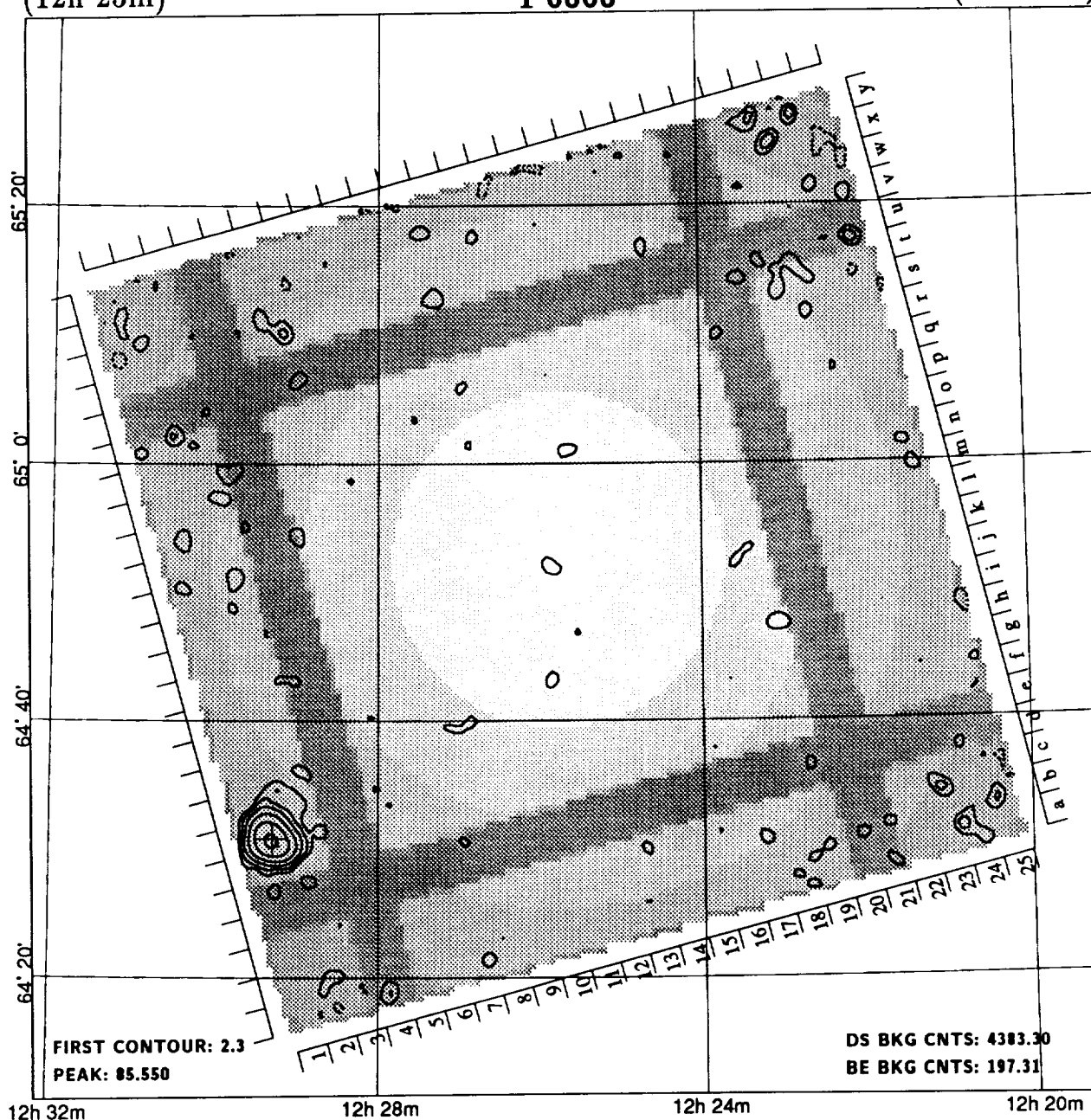
NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS: L



(12h 25m)

I 6868

(12h 25m)



A1546, CLUSTER LUMINOSITIES @ Z=0.25.

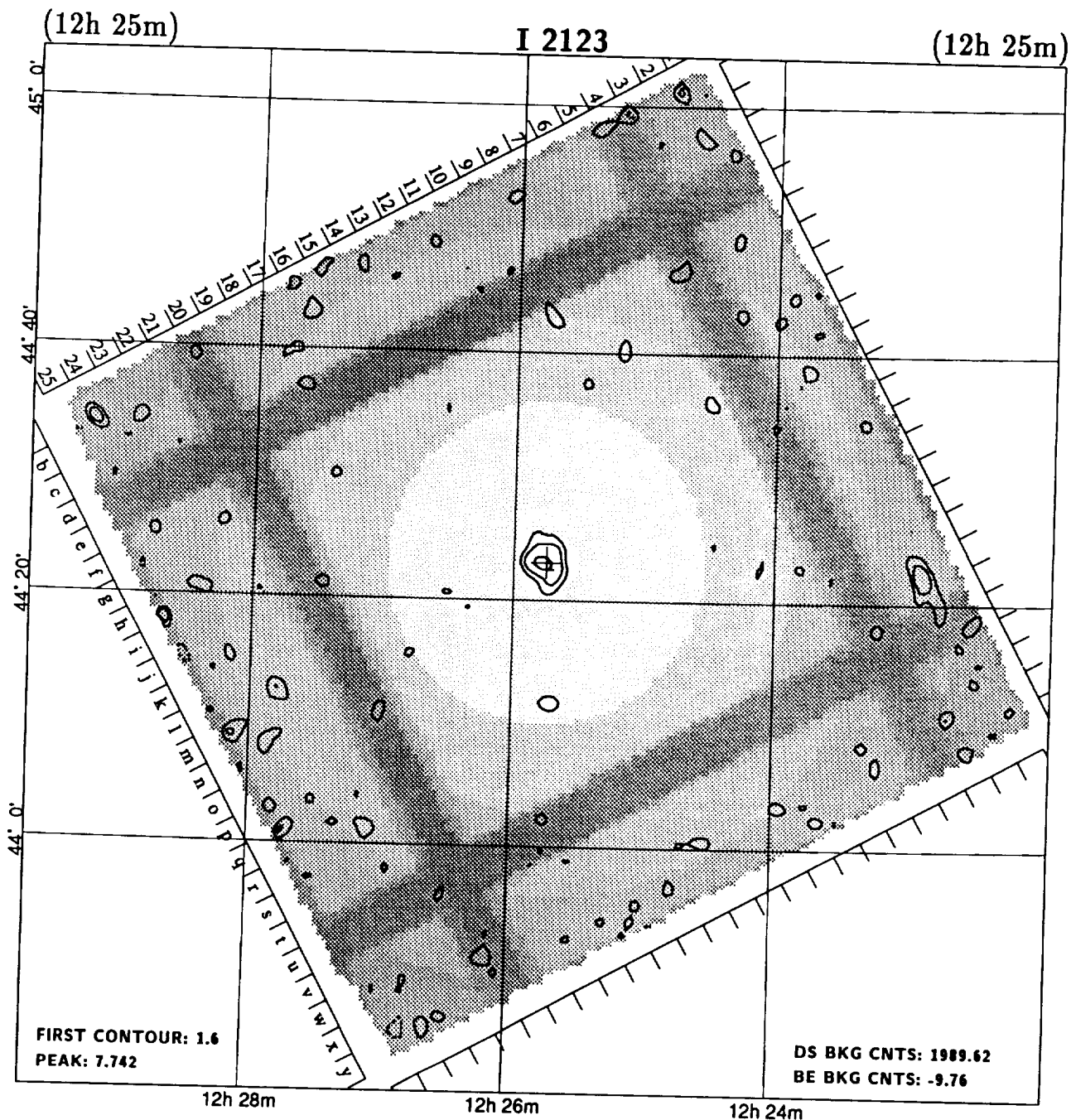
FIELD CENTER: 12<sup>h</sup>25<sup>m</sup>42.0<sup>s</sup> 64°52'59" (B1950)  
 12<sup>h</sup>27<sup>m</sup>59.2<sup>s</sup> 64°36'24" (J2000)  
 $l$ : 127.04  $b$ : 52.33

DATE: 1980/357 - 1980/358  
 LIVETIME: 3551.9s  
 ROLL ANGLE: -104.9°

NH: 2.0E+20  
 REF/ID: CLG  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2754	1	12 29 17.4	64 30 53	48	0.137	0.011	160.2	6.8	12.4	1.4	0	31.9	H	





**X-RAY SURVEY OF NORMAL GALAXIES: NGC4449**

FIELD CENTER:  $12^{\text{h}}25^{\text{m}}48.0^{\text{s}}$   $44^{\circ}21'59''$  (B1950)  
 $12^{\text{h}}28^{\text{m}}14.1^{\text{s}}$   $44^{\circ}05'24''$  (J2000)  
 $\ell$ : 136.83  $b$ : 72.41

DATE: 1979/167 - 1979/167  
 LIVETIME: 1612.3s  
 ROLL ANGLE:  $61.5^{\circ}$

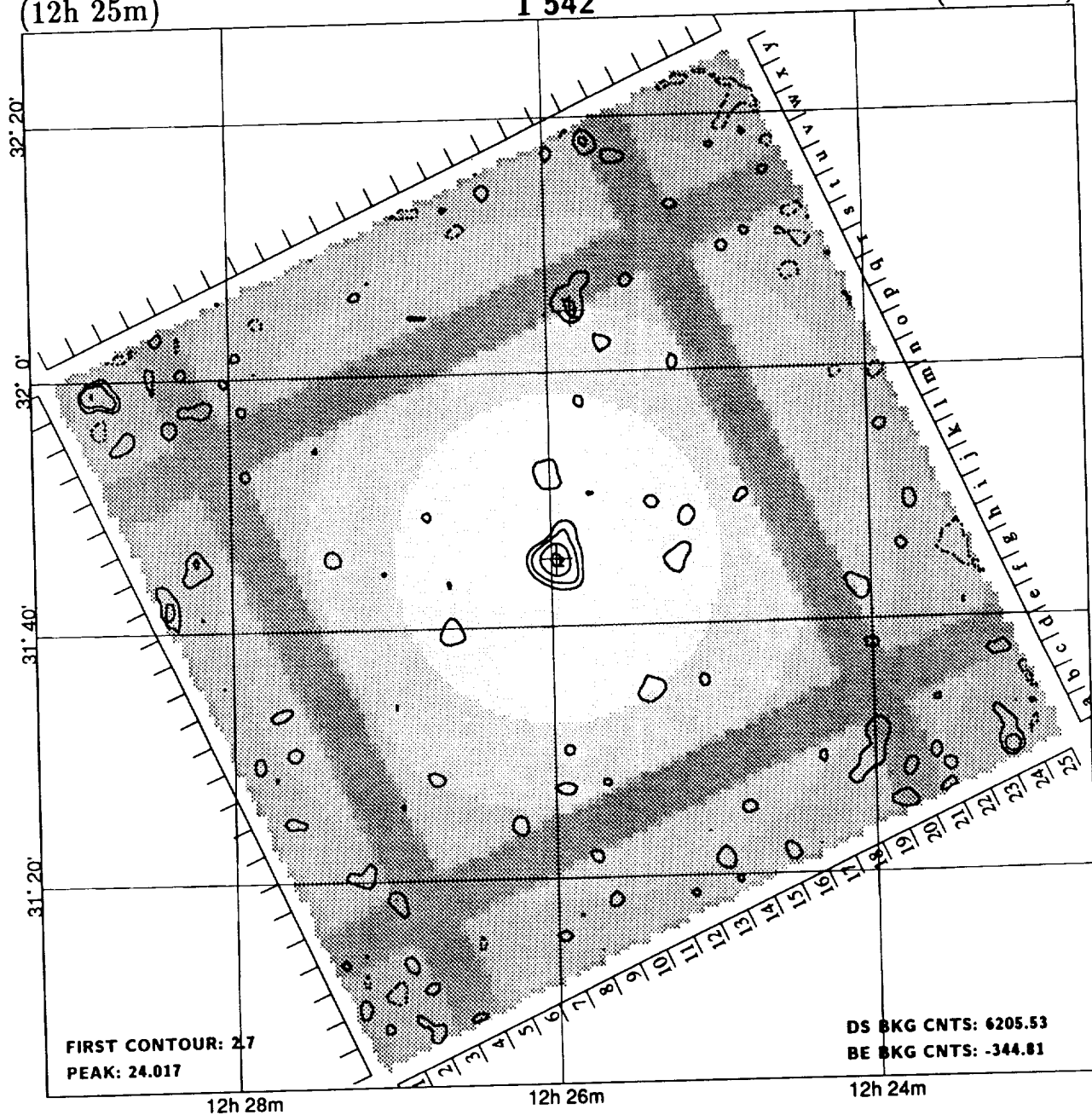
NH:  $1.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2722	1	12 25 44.9	44 23 03	36	0.0293	0.0053	35.3	4.7	5.6	1.3	0	1.3	H	G

(12h 25m)

I 542

(12h 25m)



FIRST CONTOUR: 2.7  
PEAK: 24.017

DS BKG CNTS: 6205.53  
BE BKG CNTS: -344.81

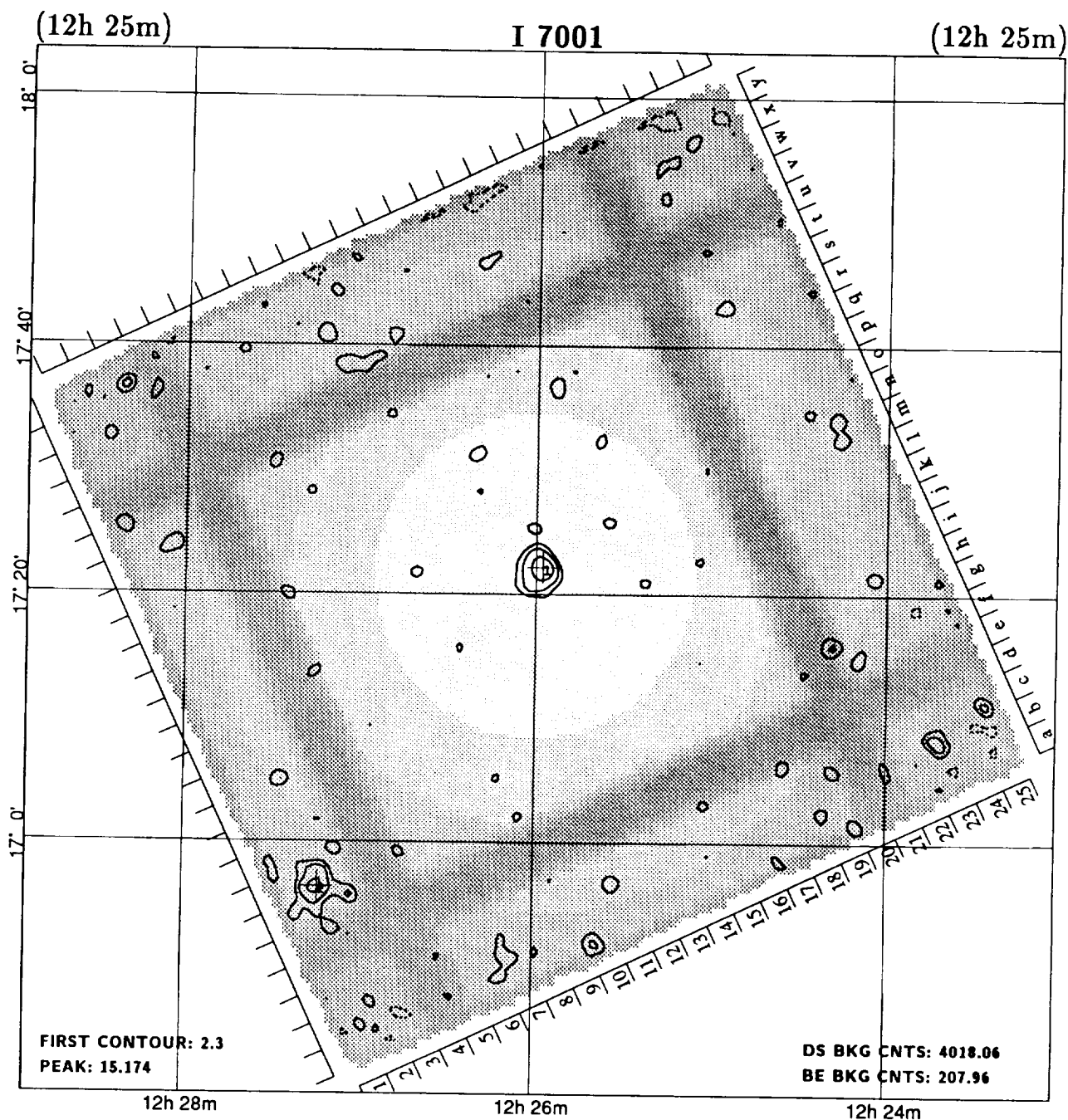
## B2 1225+31 QUASAR SURVEY

FIELD CENTER:  $12^h 25^m 56.0^s$   $31^\circ 45' 47''$  (B1950)  
 $12^h 28^m 24.9^s$   $31^\circ 29' 12''$  (J2000)  
 $l: 170.58$   $b: 83.35$

DATE: 1978/353 - 1978/353  
LIVETIME: 5028.5s  
ROLL ANGLE:  $-114.8^\circ$

NH:  $1.5E+20$   
REF/ID: !  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2723	1	12 25 50.9	32 04 48	58	*0.0073	0.0020	18.8	9.2	3.5	1.0	1108	19.6	H	
2728	2	12 25 58.1	31 45 16	31	0.0258	0.0028	96.7	13.3	9.2	1.3	0	0.8	H	Q



NGC 4450, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 25^m 58.2^s$   $17^\circ 21' 41''$  (B1950)  
 $12^h 28^m 29.5^s$   $17^\circ 05' 06''$  (J2000)  
 $l: 273.91$   $b: 78.64$

DATE: 1979/353 - 1979/353

NH:  $2.4E+20$

LIVETIME: 3256.0s

REF/ID:

ROLL ANGLE:  $-115.1^\circ$

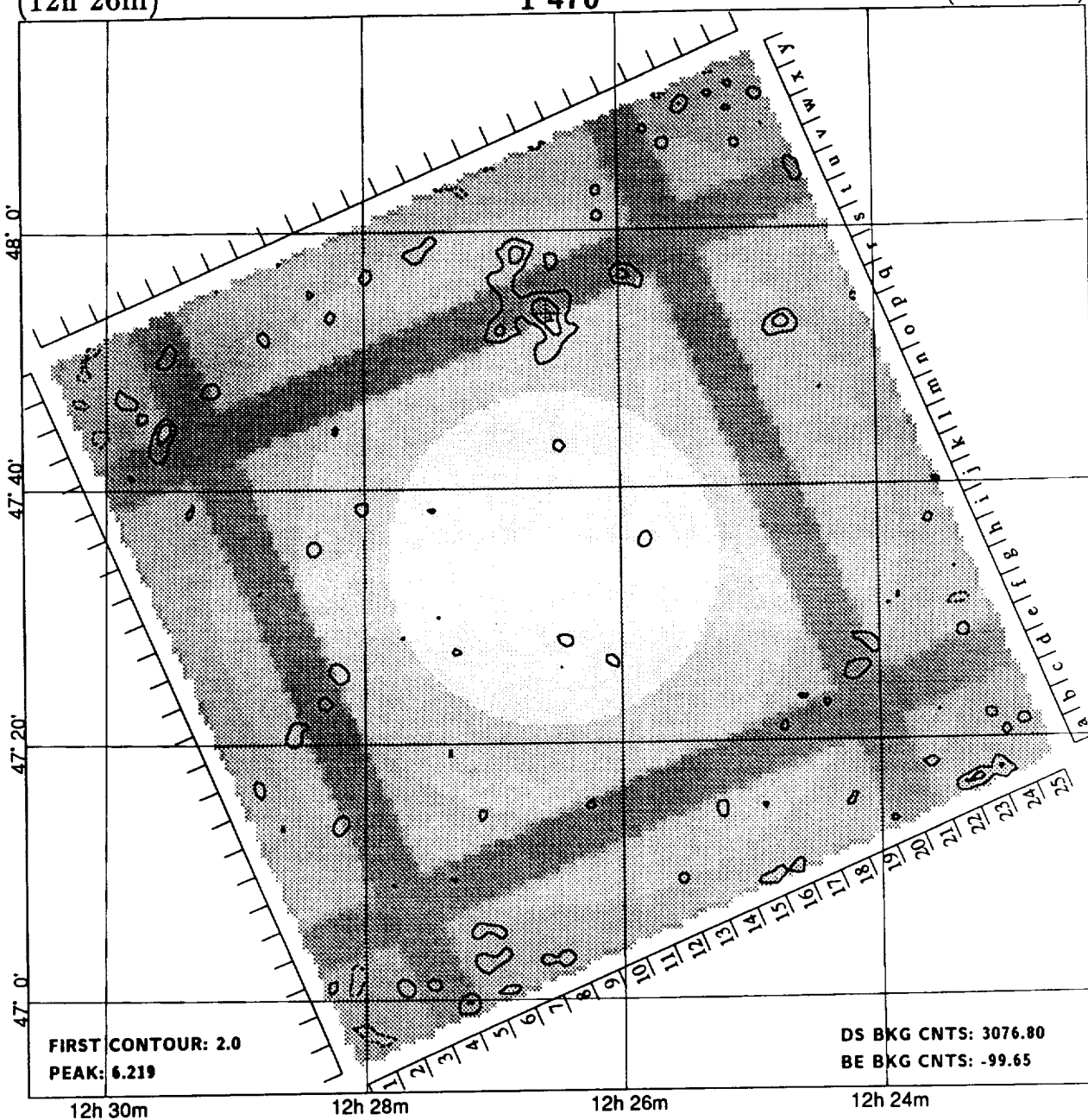
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2727	1	12 25 57.7	17 22 09	35	0.0264	0.0036	64.1	10.9	7.4	1.2	0	0.2	H	
2734	2	12 27 13.8	16 56 23	55	0.0173	0.0046	19.2	6.8	3.8	1.3	0	31.1	H	

(12h 26m)

I 470

(12h 26m)



FIELD CENTER:  $12^h 26^m 29.5^s$   $47^\circ 34' 58''$  (B1950)  
 $12^h 28^m 54.5^s$   $47^\circ 18' 23''$  (J2000)  
 $l: 133.81$   $b: 69.34$

DATE: 1978/352 - 1978/352  
 LIVETIME: 2493.2s  
 ROLL ANGLE:  $-113.4^\circ$

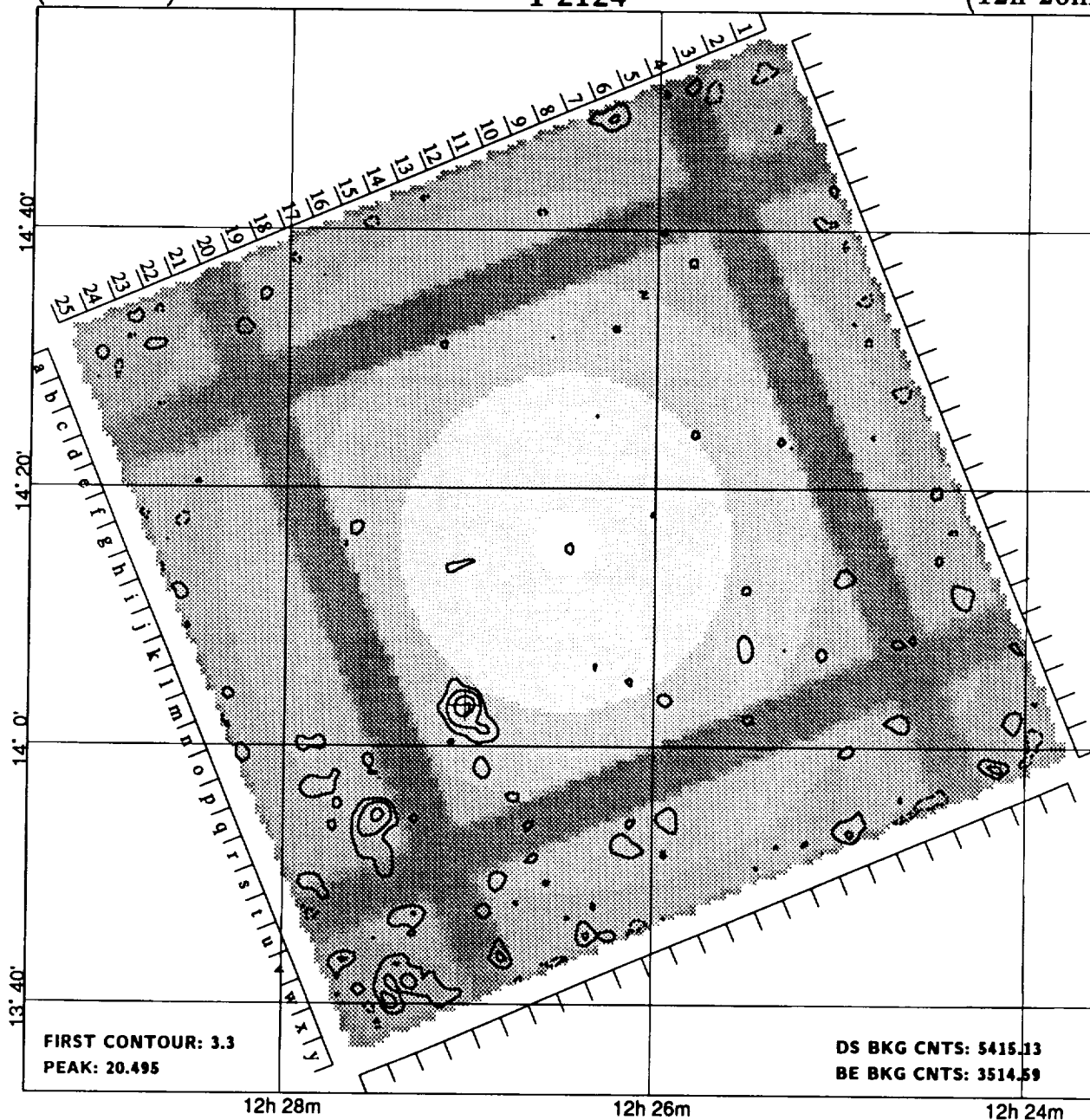
NH:  $1.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2730	1	12 26 34.1	47 53 33	55	*0.0131	0.0036	17.0	5.0	3.6	2.9	1108	18.8	H	

(12h 26m)

I 2124

(12h 26m)



## X-RAY SURVEY OF NORMAL GALAXIES: NGC4459

FIELD CENTER:  $12^{\text{h}}26^{\text{m}}30.0^{\text{s}}$   $14^{\circ}14'59''$  (B1950)  
 $12^{\text{h}}29^{\text{m}}01.7^{\text{s}}$   $13^{\circ}58'25''$  (J2000)  
 $l: 280.14$   $b: 75.84$

DATE: 1979/181 - 1980/177  
 LIVETIME: 4388.1s  
 ROLL ANGLE:  $67.3^{\circ}$

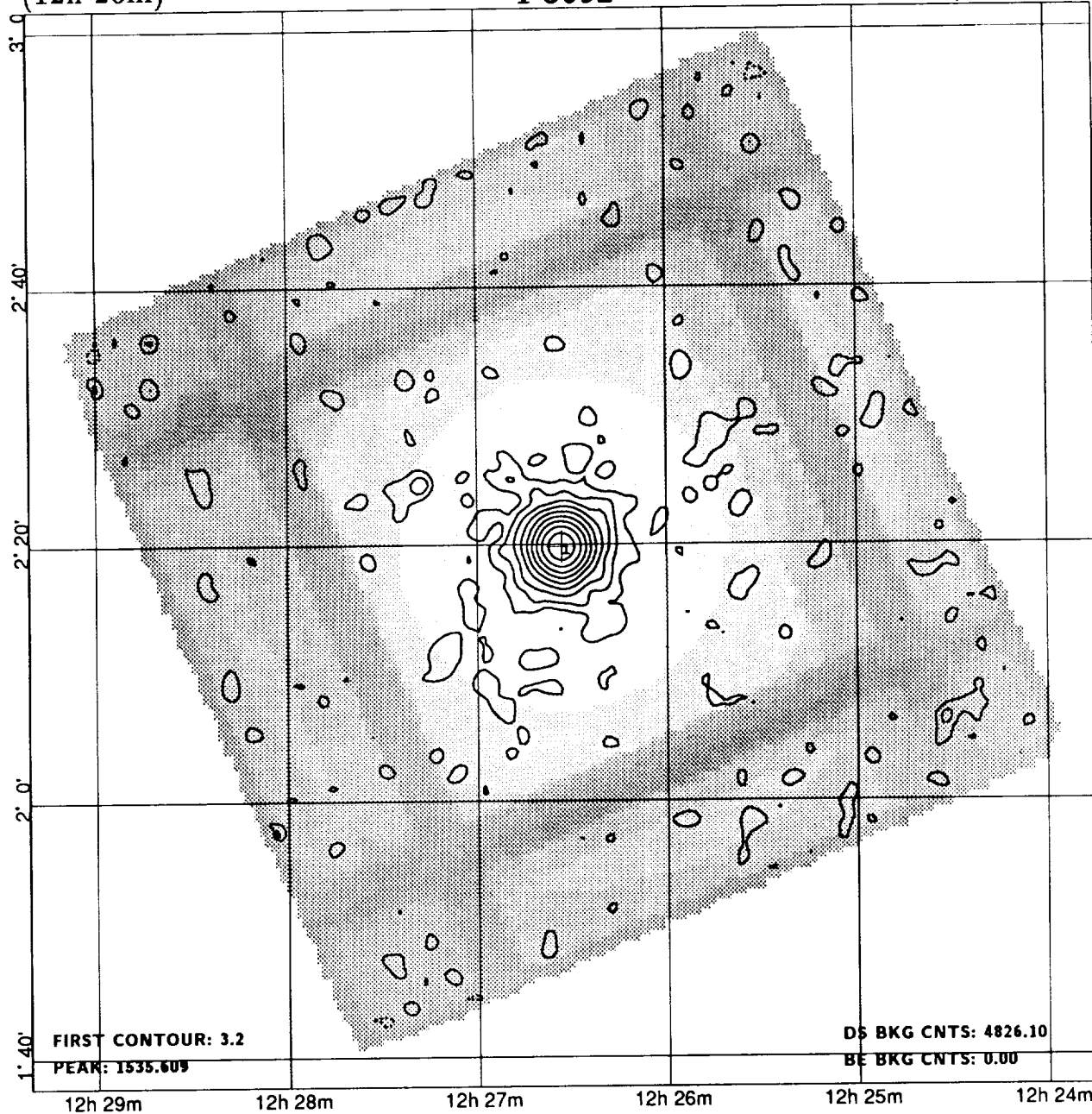
NH:  $2.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2733	1L	12 27 01.3	14 03 11	41	0.0190	0.0041	49.4	30.6	4.5	1.3	0	13.9	A	Q

(12h 26m)

I 5692

(12h 26m)



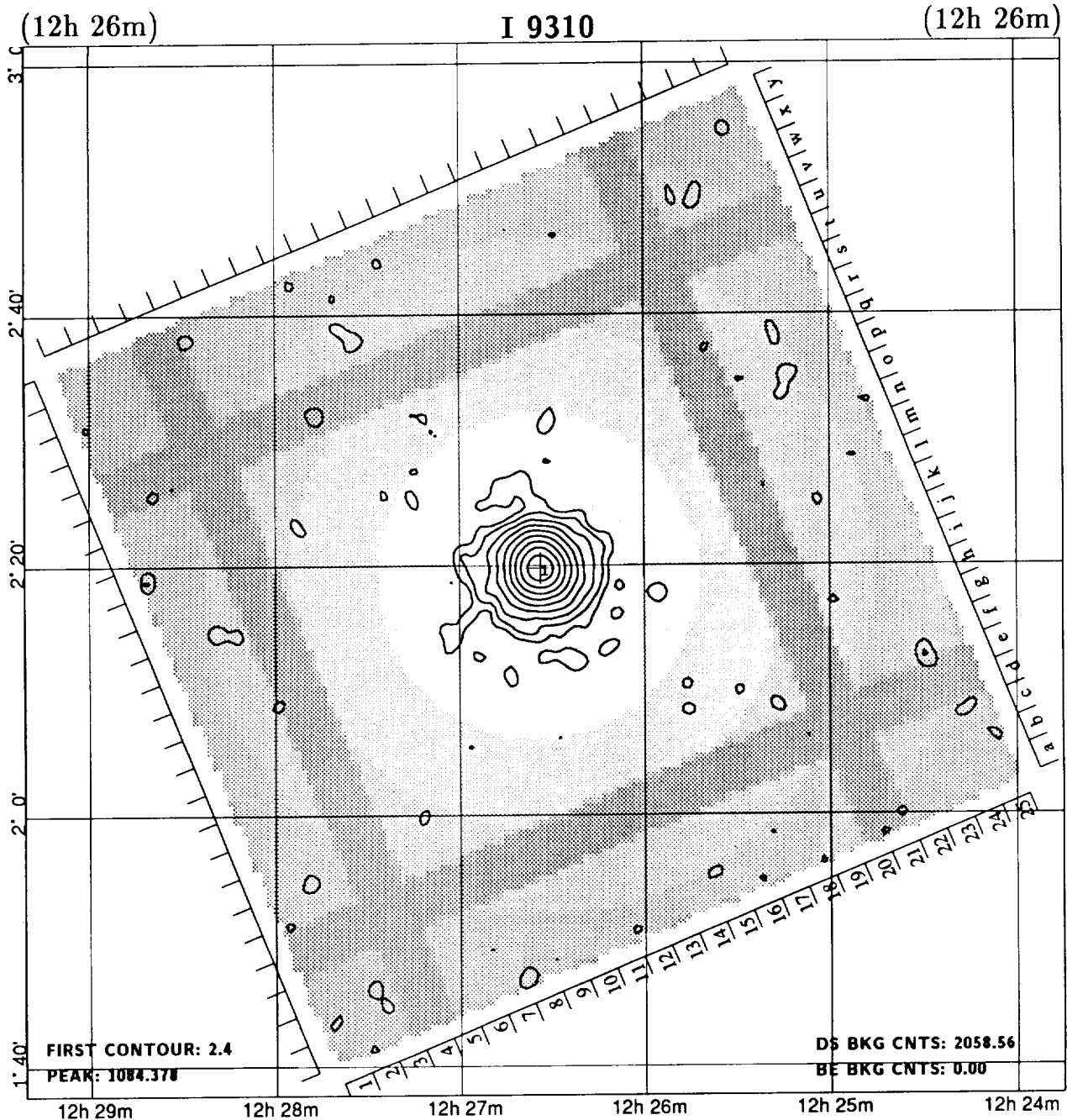
## 3C 273: STUDY OF VARIABILITY

FIELD CENTER:  $12^h 26^m 33.0^s$   $02^\circ 19' 41''$  (B1950)  
 $12^h 29^m 06.4^s$   $02^\circ 03' 07''$  (J2000)  
 $l: 289.95$   $b: 64.36$

DATE: 1980/ 1 - 1980/193  
 LIVETIME: 3910.7s

NH:  $1.8E+20$   
 REF/ID: Q  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2729	1L	12 26 33.2	02 19 49	31	1.976	0.031	5771.7	726.3	63.0	1.3	0	0.1	A	Q



### 3C 273: STUDY OF VARIABILITY

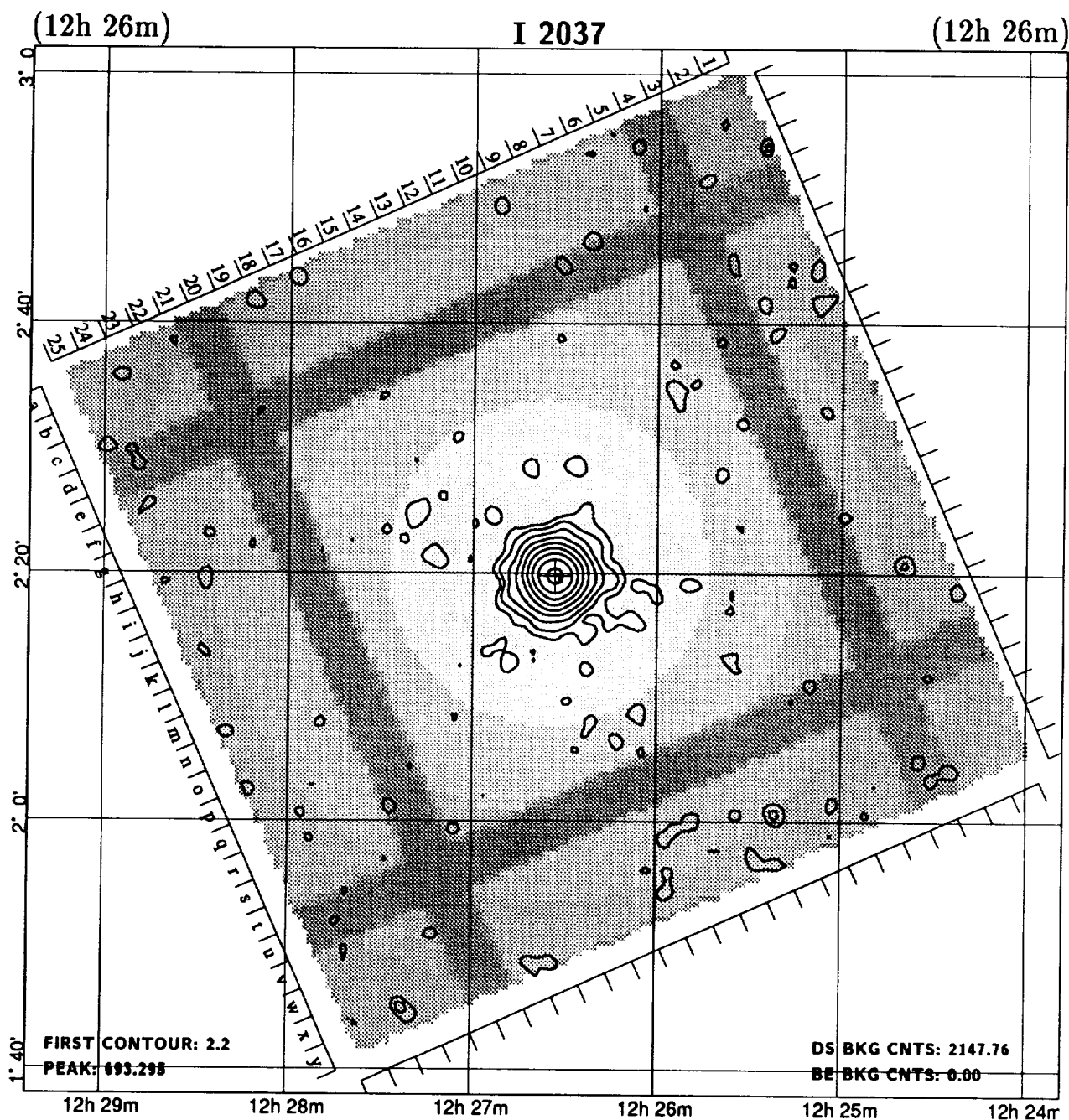
FIELD CENTER:  $12^h 26^m 33.1^s$   $02^\circ 19' 40''$  (B1950)  
 $12^h 29^m 06.5^s$   $02^\circ 03' 06''$  (J2000)  
 $l: 289.95$   $b: 64.36$

DATE: 1980/348 - 1981/8  
 LIVETIME: 1668.1s  
 ROLL ANGLE:  $-112.3^\circ$

NH:  $1.8E+20$   
 REF/ID: Q  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2729	1L	12 26 33.8	02 19 47	31	3.161	0.063	3924.5	706.5	50.3	1.5	0	0.3	A	Q





3C 273: X-RAY STUDY OF QUASARS

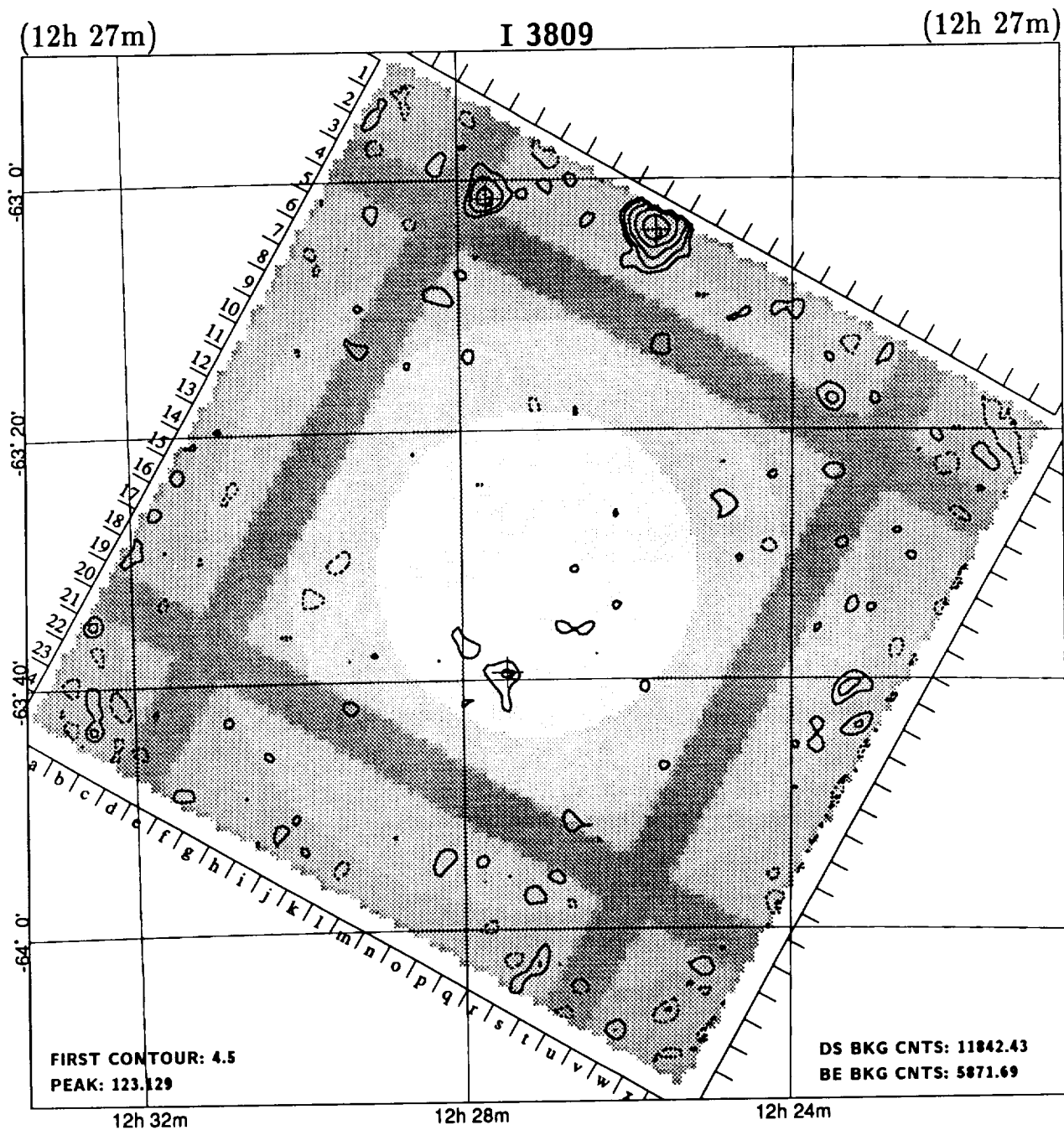
FIELD CENTER: 12<sup>h</sup>26<sup>m</sup>36.0<sup>s</sup> 02°19'59" (B1950)  
12<sup>h</sup>29<sup>m</sup>09.4<sup>s</sup> 02°03'25" (J2000)  
 $l$ : 289.97  $b$ : 64.37

DATE: 1979/171 - 1979/172  
LIVETIME: 1740.4s  
ROLL ANGLE: 66.1°

NH: 1.8E+20  
REF/ID: Q  
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2729	1L	12 26 33.4	02 19 49	31	2.047	0.049	2647.3	450.7	41.5	1.4	0	0.7	A	Q





**DENSE INTERSTELLAR CLOUDS: COALSACK**

FIELD CENTER:  $12^{\text{h}}27^{\text{m}}00.0^{\text{s}}$   $-63^{\circ}31'47''$  (B1950)  
 $12^{\text{h}}29^{\text{m}}50.4^{\text{s}}$   $-63^{\circ}48'22''$  (J2000)  
 $l: 300.55$   $b: -1.03$

DATE: 1979/241 - 1979/241  
 LIVETIME: 9596.4s  
 ROLL ANGLE:  $29.6^{\circ}$

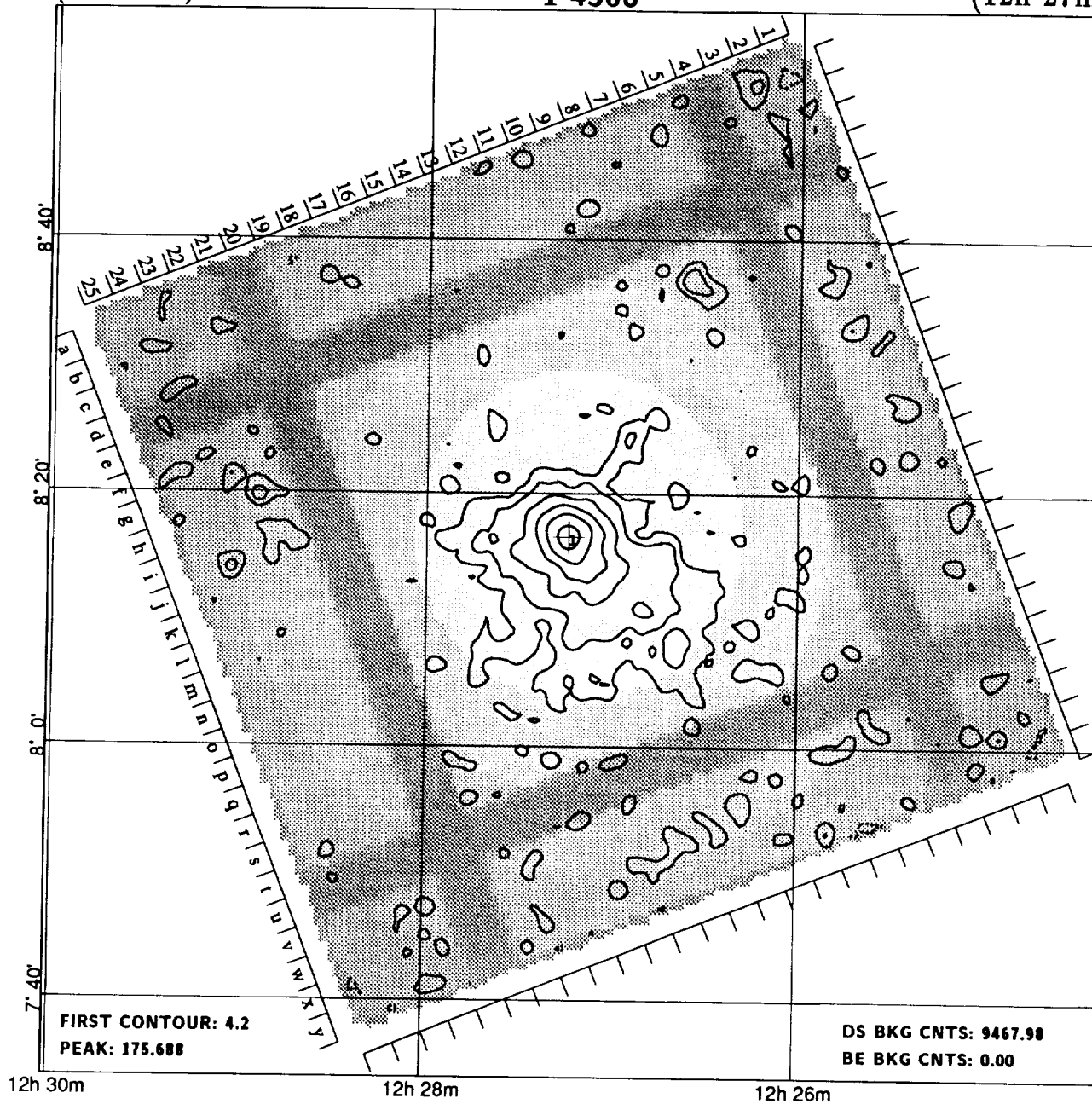
NH:  $1.5\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2720	1	12 25 37.5	-63 04 10	47	0.0750	0.0048	262.6	25.4	15.5	1.3	400	29.1	H	
2738	2	12 27 27.4	-63 39 23	43	0.0051	0.0013	33.3	41.7	3.8	0.8	0	8.2	H	
2742	3	12 27 39.9	-63 01 31	56	*0.0133	0.0023	44.2	14.8	5.8	1.0	1206	30.6	H	

(12h 27m)

I 4308

(12h 27m)



## VIRGO CLUSTER FOLLOW-UP: NGC 4472

FIELD CENTER:  $12^h 27^m 12.0^s$   $08^\circ 15' 59''$  (B1950)  
 $12^h 29^m 44.5^s$   $07^\circ 59' 25''$  (J2000)  
 $l: 286.90$   $b: 70.18$

DATE: 1979/183 - 1979/191

NH:  $1.6E+20$ 

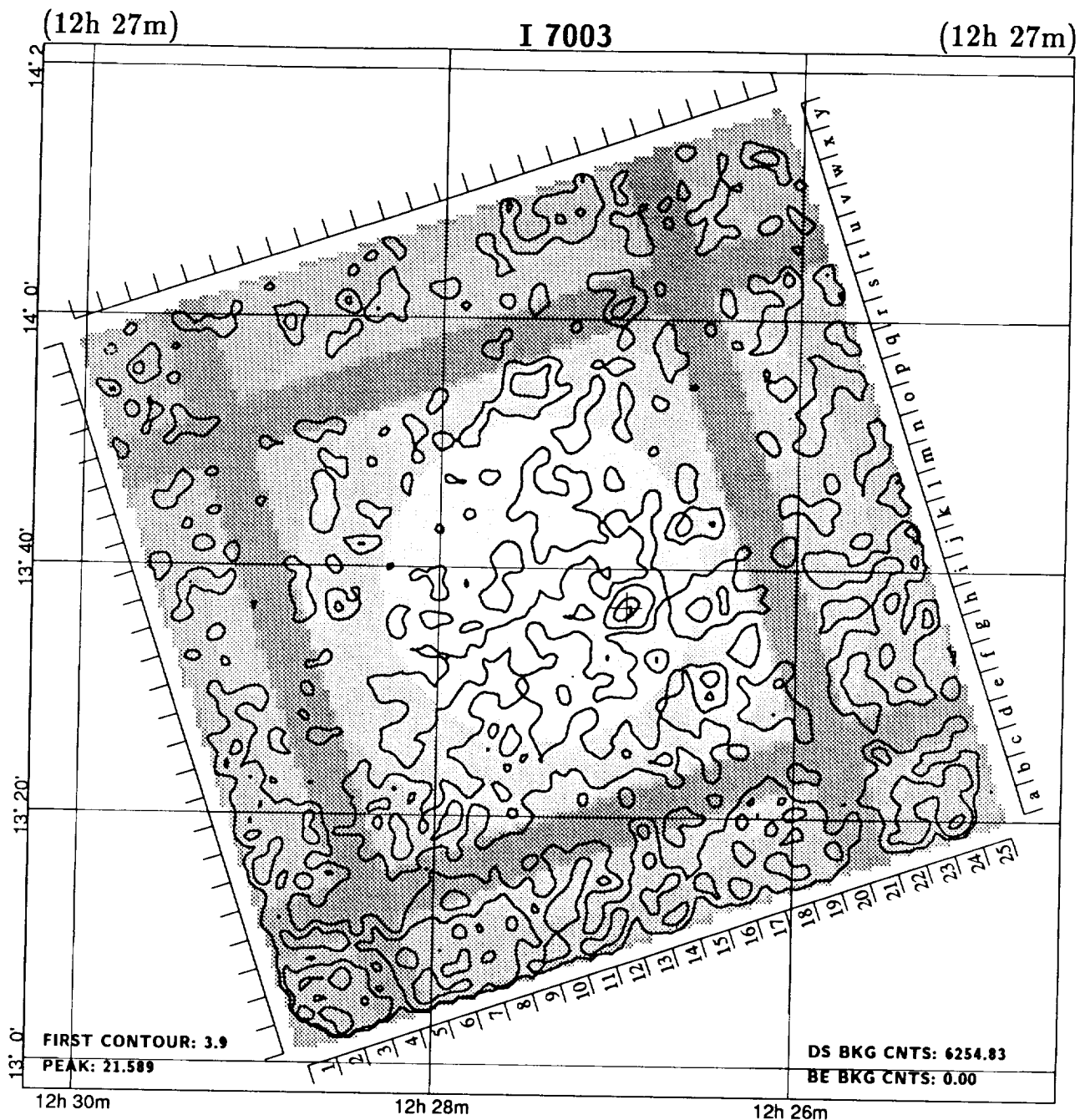
LIVETIME: 7672.2s

REF/ID:

ROLL ANGLE:  $68.6^\circ$ 

FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2735	1L	12 27 14.1	08 16 31	31	0.0952	0.0063	543.1	340.9	15.1	4.2	0	0.6	A	G



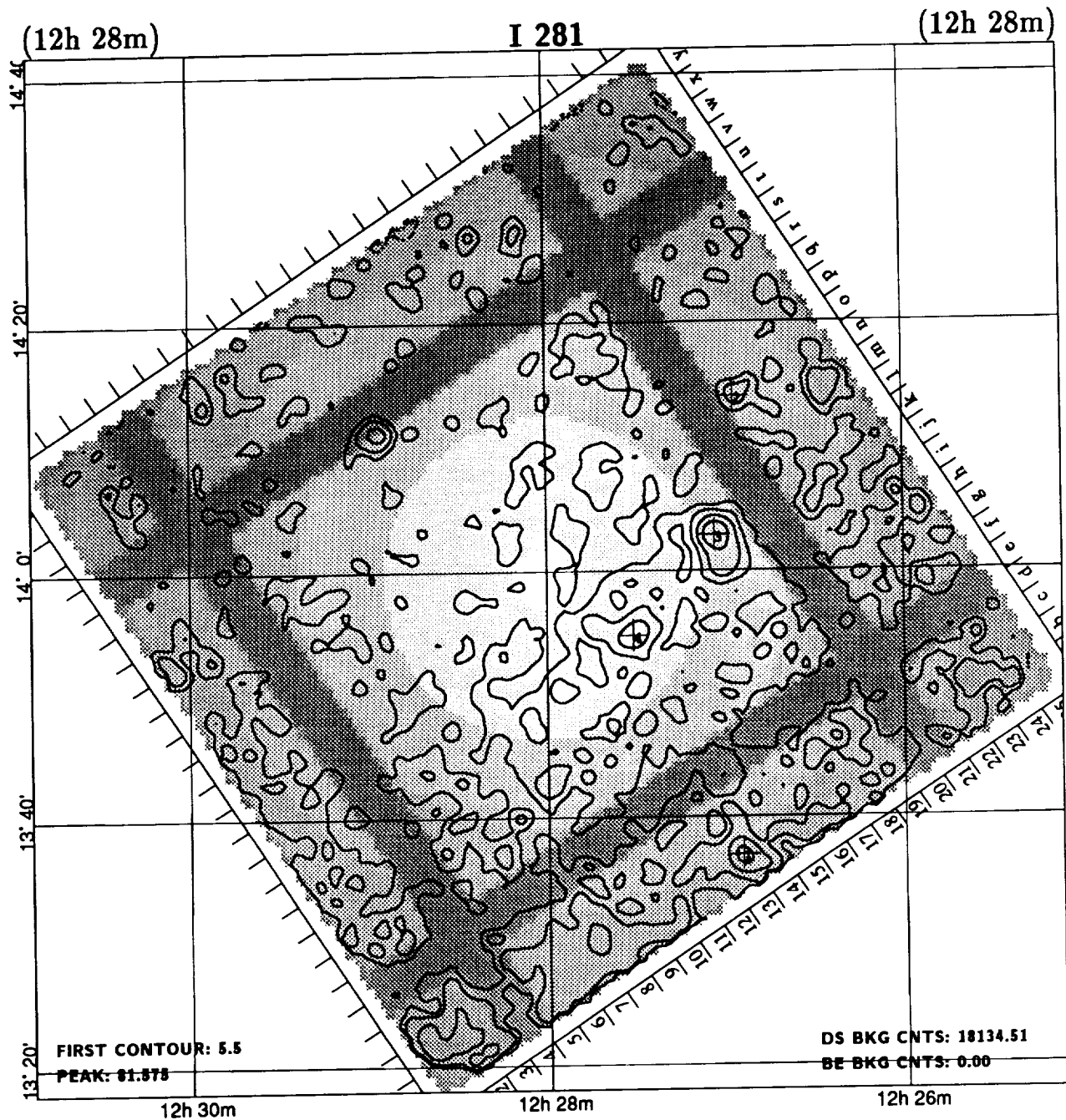
NGC 4473/4477,VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 27^m 23.7^s$   $13^\circ 39' 32''$  (B1950)  
 $12^h 29^m 55.4^s$   $13^\circ 22' 58''$  (J2000)  
 $l: 281.78$   $b: 75.36$

DATE: 1981/ 11 - 1981/ 11  
 LIVETIME: 5068.5s  
 ROLL ANGLE:  $-108.6^\circ$

NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2732	1L	12 26 56.8	13 36 52	41	0.0155	0.0036	54.4	51.6	4.2	6.1	0	6.9	A	Q



NGC 4254 VIRGO CLUSTER IMAGE

FIELD CENTER:  $12^h 28^m 00.0^s$   $13^\circ 59' 59''$  (B1950)  
 $12^h 30^m 31.6^s$   $13^\circ 43' 25''$  (J2000)  
 $l: 281.88$   $b: 75.73$

DATE: 1978/356 - 1978/357  
 LIVETIME: 14695.0s  
 ROLL ANGLE:  $-123.3^\circ$

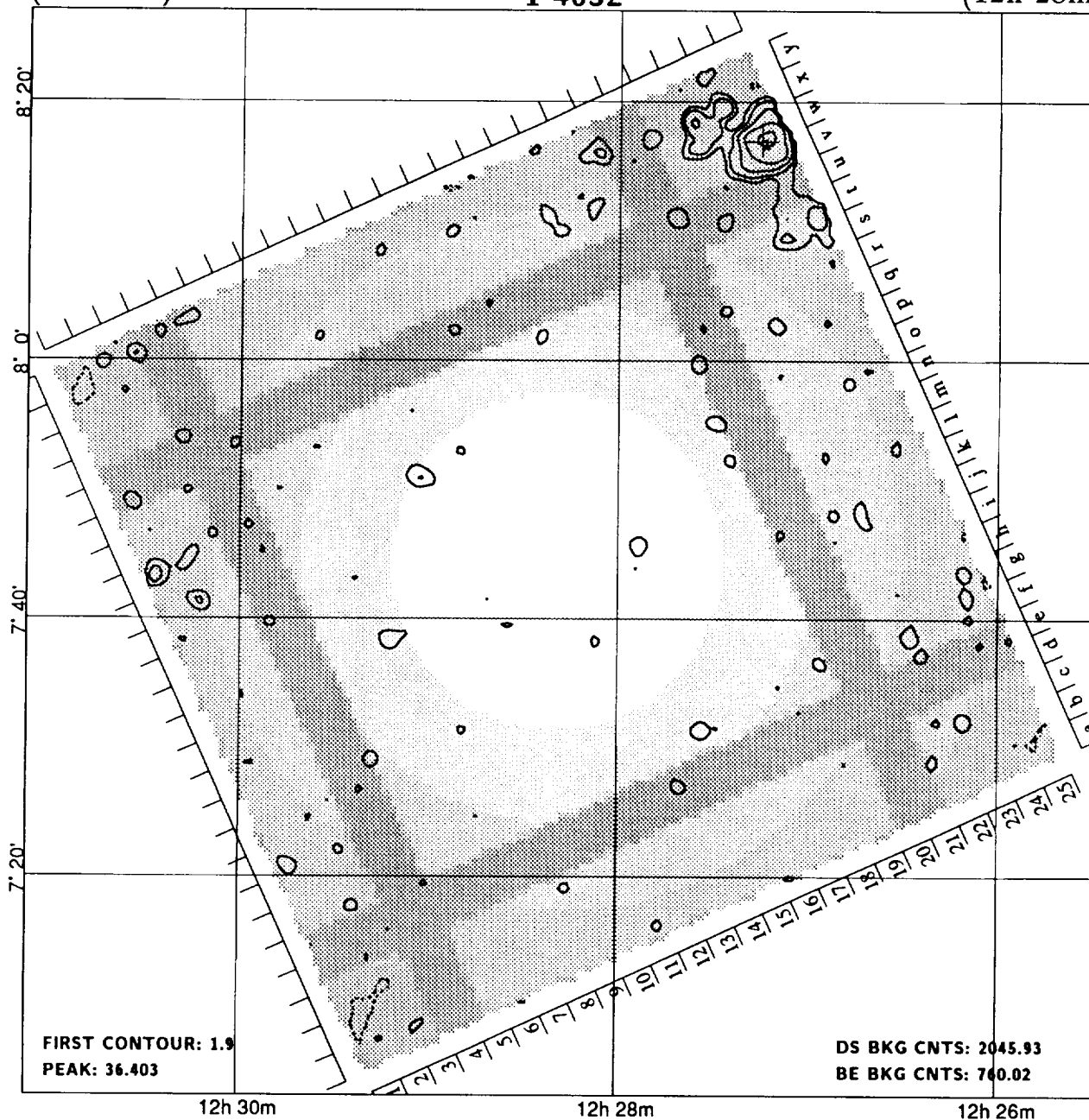
NH:  $2.7E+20$   
 REF/ID: I  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2732	1L	12 26 54.6	13 36 53	49	0.0165	0.0026	94.2	58.8	6.2	28.3	100	28.1	A	Q
2731	2L	12 26 56.7	14 13 58	65	*0.0065	0.0018	46.7	34.3	3.5	1.1	602	20.8		
2733	3L	12 27 03.5	14 02 50	38	0.0210	0.0023	185.5	110.5	8.9	19.8	100	14.0	A	Q
2739	4L	12 27 30.9	13 54 47	38	0.0089	0.0017	89.1	101.9	5.1	39.0	0	8.6		G

(12h 28m)

I 4052

(12h 28m)



## HIGH REDSHIFT QUASAR

FIELD CENTER:  $12^{\text{h}}28^{\text{m}}18.0^{\text{s}}$   $07^{\circ}44'59''$  (B1950)  
 $12^{\text{h}}30^{\text{m}}50.6^{\text{s}}$   $07^{\circ}28'26''$  (J2000)  
 $\ell$ : 288.04  $b$ : 69.75

DATE: 1979/354 - 1979/354

NH:  $1.6\text{E}+20$ 

LIVETIME: 1657.9s

REF/ID:

ROLL ANGLE:  $-114.5^{\circ}$ 

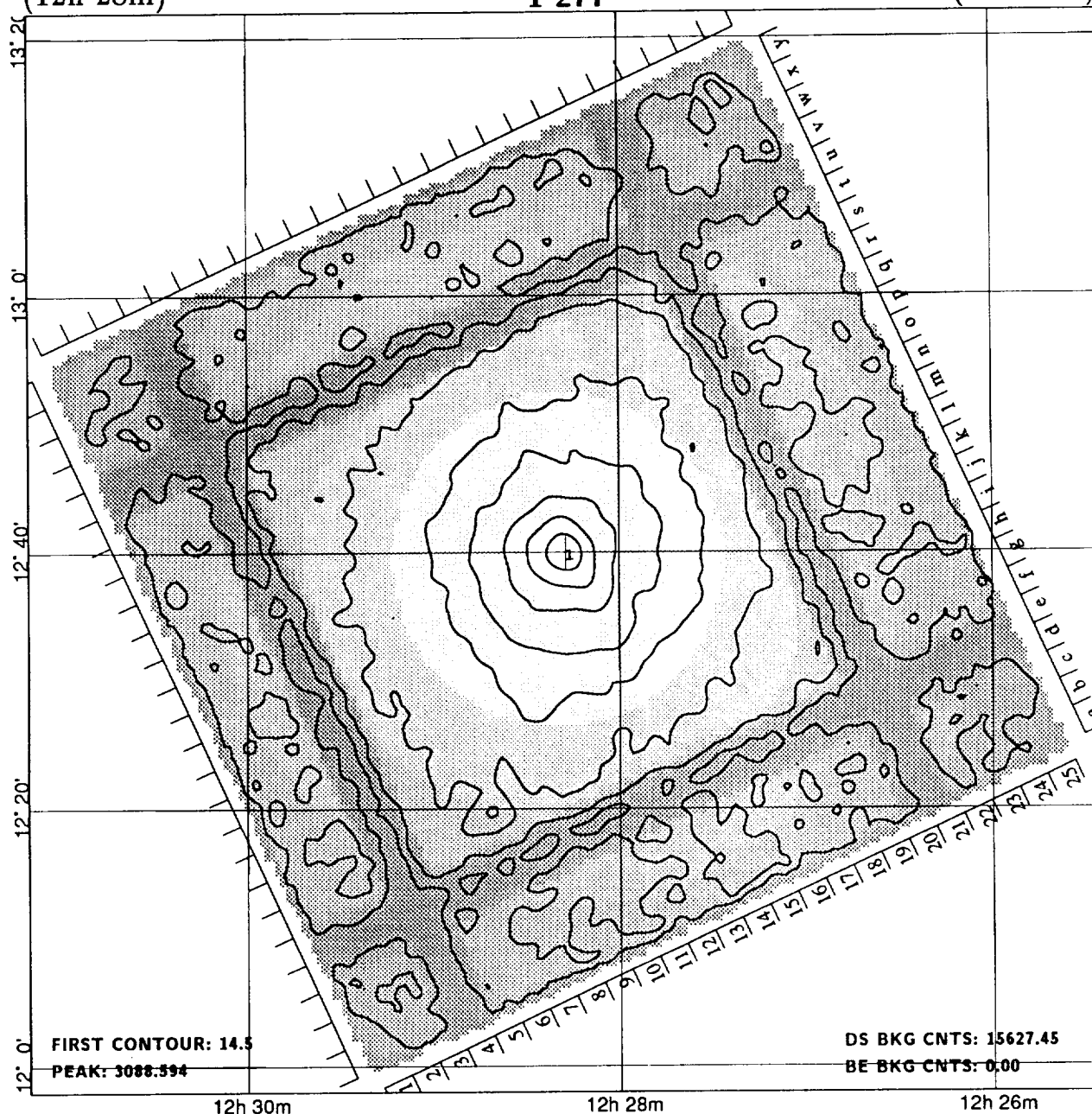
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2735	1	12 27 15.1	08 16 56	50	0.126	0.018	51.7	3.3	7.0	2.2	300	35.5	AH	G

(12h 28m)

I 277

(12h 28m)



## M87 VIRGO CLUSTER IMAGE

FIELD CENTER:  $12^h 28^m 18.0^s$   $12^\circ 39' 59''$  (B1950)  
 $12^h 30^m 49.8^s$   $12^\circ 23' 26''$  (J2000)  
 $l: 283.78$   $b: 74.49$

DATE: 1978/354 - 1978/357  
 LIVETIME: 12663.4s  
 ROLL ANGLE:  $-114.8^\circ$

NH:  $2.4E+20$   
 REF/ID: !  
 FIELD FLAGS: DLT

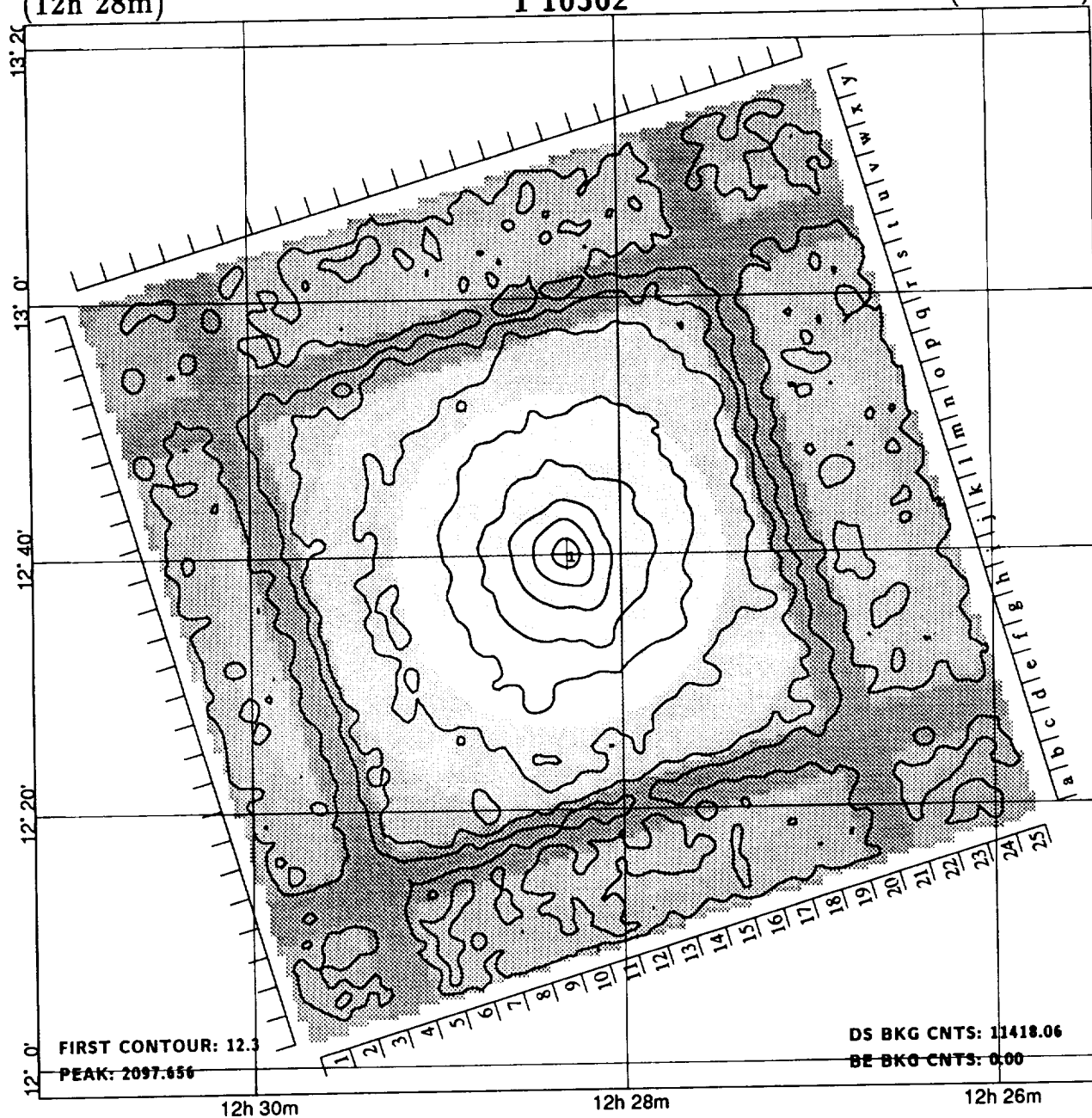
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2744	1L	12 28 17.4	12 40 00	31	0.846	0.016	7973.5	7274.5	52.5	12.5	0	0.0	A	G

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(12h 28m)

I 10362

(12h 28m)



FIELD CENTER:  $12^h 28^m 18.0^s$   $12^\circ 40' 00''$  (B1950)  
 $12^h 30^m 49.8^s$   $12^\circ 23' 27''$  (J2000)  
 $l: 283.78$   $b: 74.49$

DATE: 1981/ 11 - 1981/ 11  
 LIVETIME: 9252.5s  
 ROLL ANGLE:  $-106.8^\circ$

NH:  $2.4E+20$   
 REF/ID:  
 FIELD FLAGS: LT

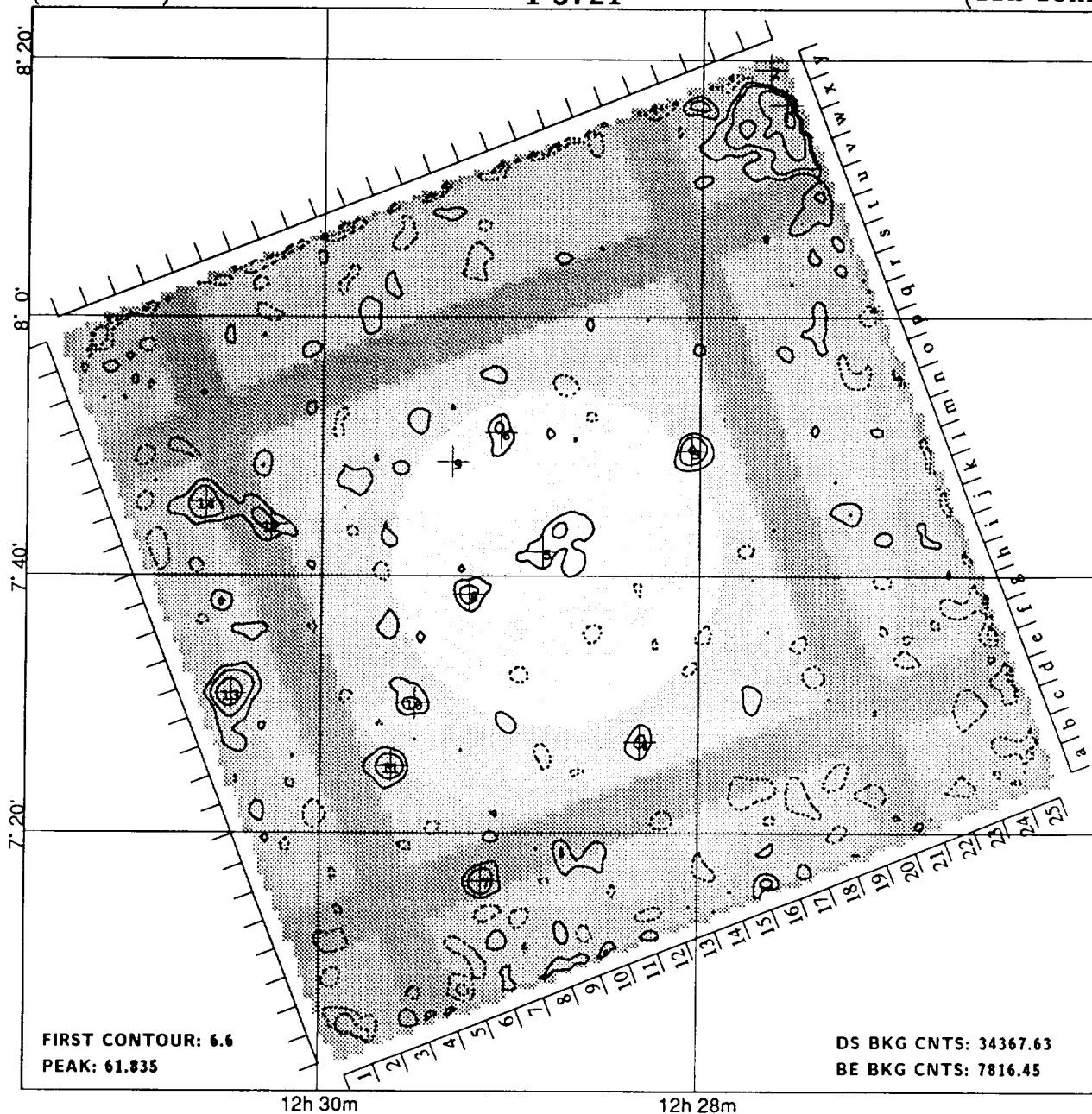
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2744	1L	12 28 17.5	12 40 03	31	0.753	0.019	5186.5	5495.5	40.5	12.0	0	0.0	A	G



(12h 28m)

I 5721

(12h 28m)



## MEDIUM DEPTH SURVEY: FAIRALL X

FIELD CENTER:  $12^h 28^m 43.9^s$   $07^\circ 41' 52''$  (B1950)  
 $12^h 31^m 16.5^s$   $07^\circ 25' 19''$  (J2000)  
 $l: 288.37$   $b: 69.72$

DATE: 1981/ 6 - 1981/ 8  
 LIVETIME: 27849.3s  
 ROLL ANGLE:  $-111.3^\circ$

NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2740	1	12 27 33.5	08 16 31	55	*0.0164	0.0025	77.0	62.0	6.5	4.7	602	38.8	EH	
2741	2	12 27 38.6	08 19 13	57	*0.0106	0.0028	34.6	47.4	3.8	0.0	1105	40.8	EH	
2743	3	12 28 02.8	07 49 39	41	0.00519	0.00077	89.2	86.8	6.7	0.9	0	12.7	H	
2745	4	12 28 18.6	07 27 03	51	0.00310	0.00072	50.2	85.8	4.3	0.7	0	15.9		
2749	5	12 28 49.8	07 41 52	41	0.00240	0.00058	49.6	95.4	4.1	4.7	0	3.1		
2751	6	12 29 03.3	07 51 05	42	0.00283	0.00065	51.8	91.2	4.3	0.8	0	10.7	H	
2752	7	12 29 08.7	07 16 19	57	*0.00514	0.00090	60.2	50.8	5.7	0.8	1409	26.3		
2753	8	12 29 13.0	07 38 31	41	0.00367	0.00070	70.7	113.3	5.2	0.7	0	7.7		
2755	9L	12 29 18.7	07 48 50	48	0.00318	0.00080	57.7	77.3	3.9	0.0	0	11.1		
2759	10	12 29 30.2	07 30 04	53	0.00364	0.00074	58.6	85.4	4.9	0.8	0	16.2	H	

Source Table cont.

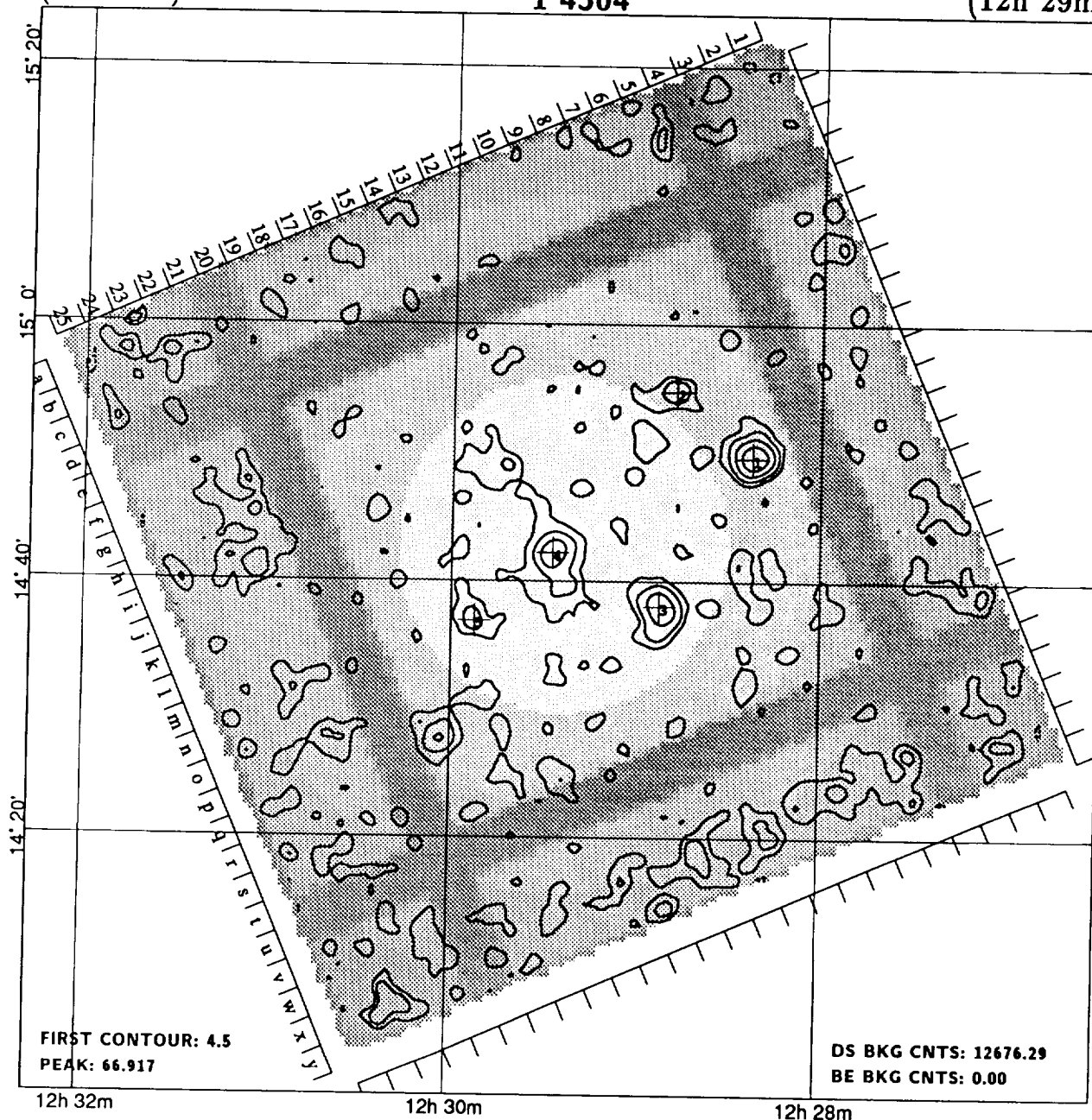
# I 5721 cont.

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2761	11	12 29 37.6	07 25 13	51	0.00450	0.00080	62.8	63.2	5.6	0.9	300	21.3	H	
2765	12	12 30 16.1	07 44 00	56	*0.00321	0.00074	41.9	52.1	4.3	2.9	1007	22.9	A	
2767	13	12 30 28.4	07 30 48	50	0.0086	0.0012	93.3	68.7	7.3	1.3	100	28.2	H	
2768	14	12 30 36.8	07 45 43	60	*0.0049	0.0010	52.2	64.8	4.8	2.0	601	28.6	H	

(12h 29m)

I 4304

(12h 29m)



FIELD CENTER:  $12^h 29^m 24.0^s$   $14^\circ 41' 59''$  (B1950)  
 $12^h 31^m 55.4^s$   $14^\circ 25' 26''$  (J2000)  
 $l: 282.26$   $b: 76.51$

DATE: 1980/178 - 1980/178  
 LIVETIME: 10272.0s  
 ROLL ANGLE:  $66.8^\circ$

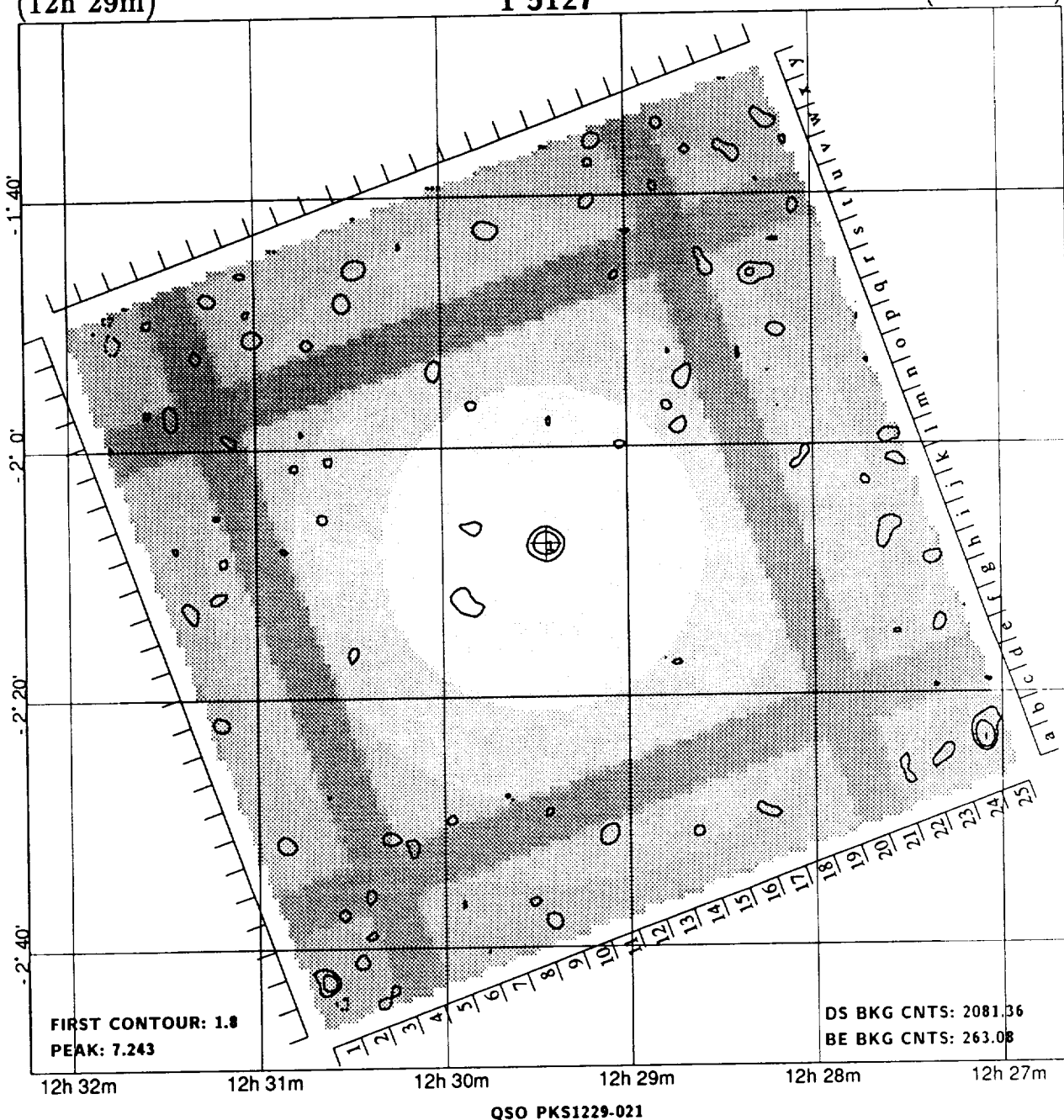
NH:  $2.5E+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2746	1L	12 28 22.2	14 49 31	47	0.0312	0.0030	182.9	42.1	10.4	1.2	0	16.8		
2748	2L	12 28 47.2	14 54 41	51	0.0076	0.0018	46.2	34.8	4.1	1.1	0	15.5		
2750	3L	12 28 52.2	14 38 03	38	0.0128	0.0022	88.7	64.3	5.8	1.6	0	8.7		
2758	4L	12 29 27.1	14 42 14	31	0.0116	0.0020	88.3	67.7	5.7	2.2	0	0.8		
2763	5L	12 29 52.4	14 36 54	42	0.0063	0.0016	43.9	36.1	3.9	1.1	0	8.5		

(12h 29m)

I 5127

(12h 29m)

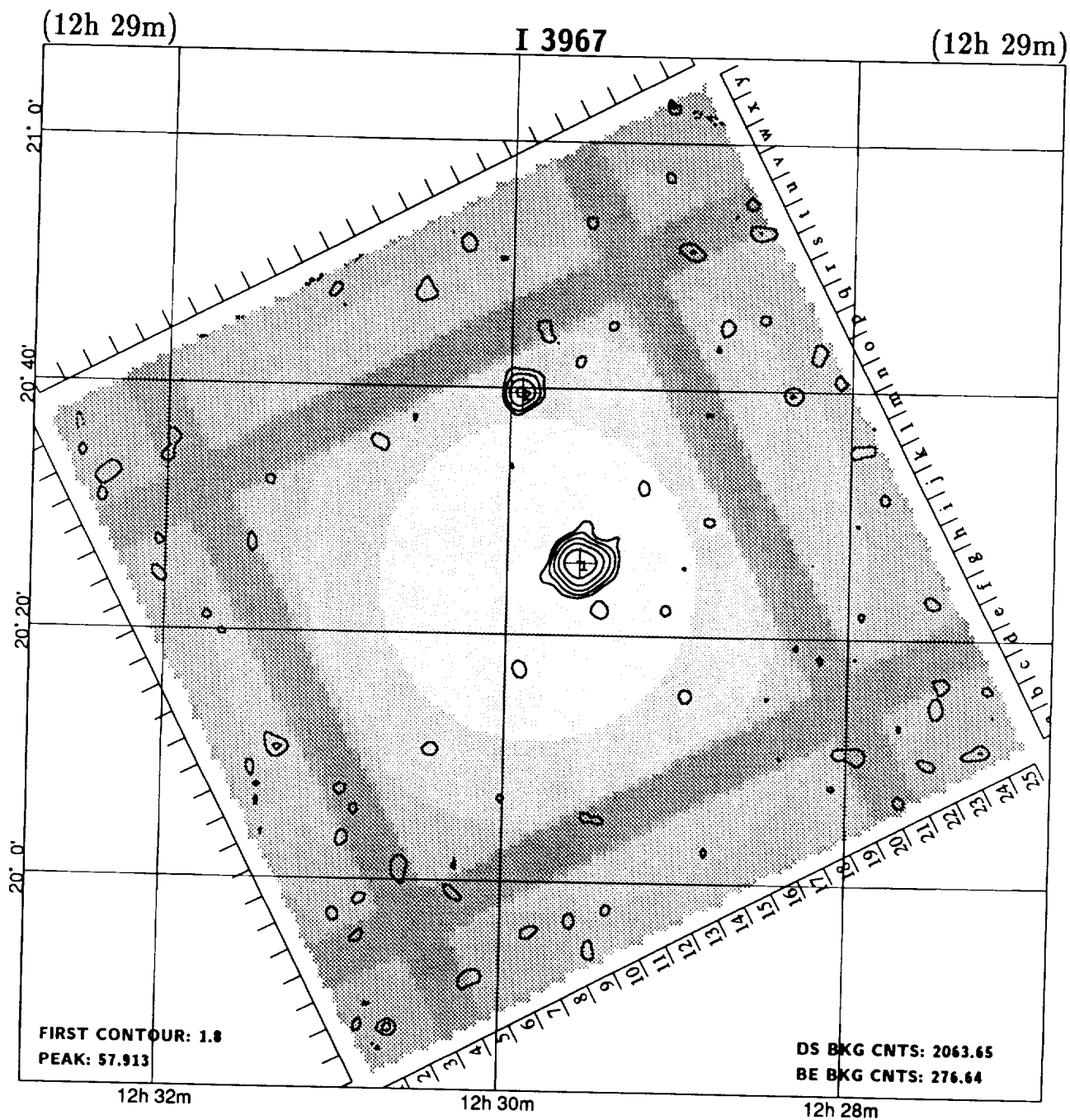


FIELD CENTER:  $12^h 29^m 26.0^s$   $-02^\circ 07' 31''$  (B1950)  
 $12^h 32^m 00.1^s$   $-02^\circ 24' 05''$  (J2000)  
 $l: 293.16$   $b: 60.10$

DATE: 1979/355 - 1979/355  
 LIVETIME: 1686.6s  
 ROLL ANGLE:  $-110.1^\circ$

NH:  $2.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2757	1	12 29 26.4	-02 07 37	36	0.0199	0.0044	25.0	6.0	4.5	0.8	0	0.2	H	Q



**1229+204, BRIGHT NEARBY QUASAR**

FIELD CENTER:  $12^h 29^m 48.0^s$   $20^\circ 24' 59''$  (B1950)  
 $12^h 32^m 18.4^s$   $20^\circ 08' 26''$  (J2000)  
 $l: 269.85$   $b: 81.75$

DATE: 1979/348 - 1979/348  
 LIVETIME: 1672.2s  
 ROLL ANGLE:  $-117.4^\circ$

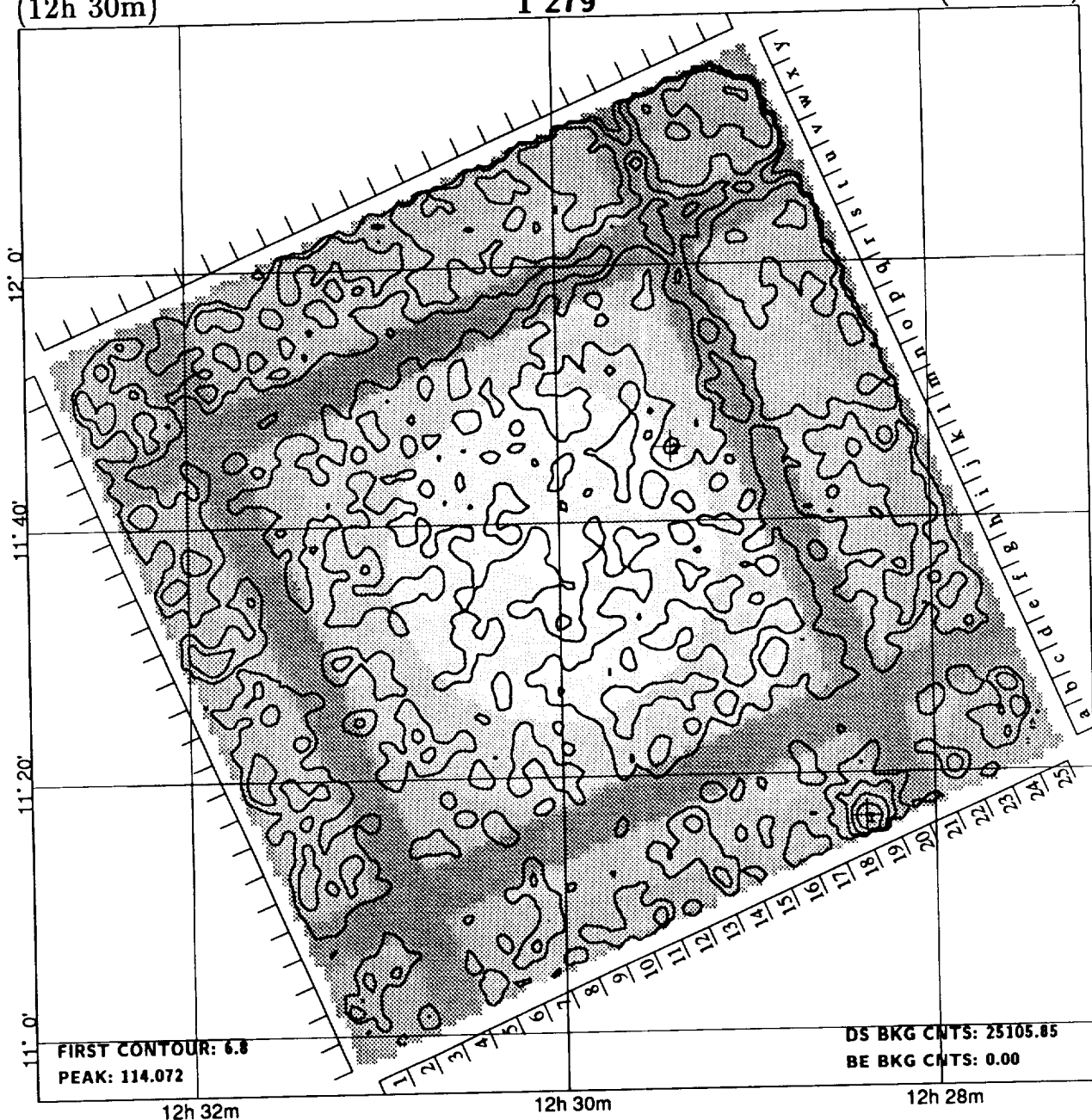
NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2760	1	12 29 34.4	20 25 54	31	0.206	0.013	249.8	6.2	15.6	1.3	0	3.2	H	Q
2764	2	12 29 55.8	20 39 36	41	0.0500	0.0075	49.0	5.0	6.7	1.0	0	14.7	H	

(12h 30m)

I 279

(12h 30m)



## NGC 4406 VIRGO CLUSTER IMAGE

FIELD CENTER:  $12^h 30^m 00.0^s$   $11^\circ 37' 29''$  (B1950)  
 $12^h 32^m 31.9^s$   $11^\circ 20' 57''$  (J2000)  
 $l: 286.30$   $b: 73.61$

DATE: 1978/359 - 1978/360  
 LIVETIME: 20344.0s  
 ROLL ANGLE:  $-113.6^\circ$

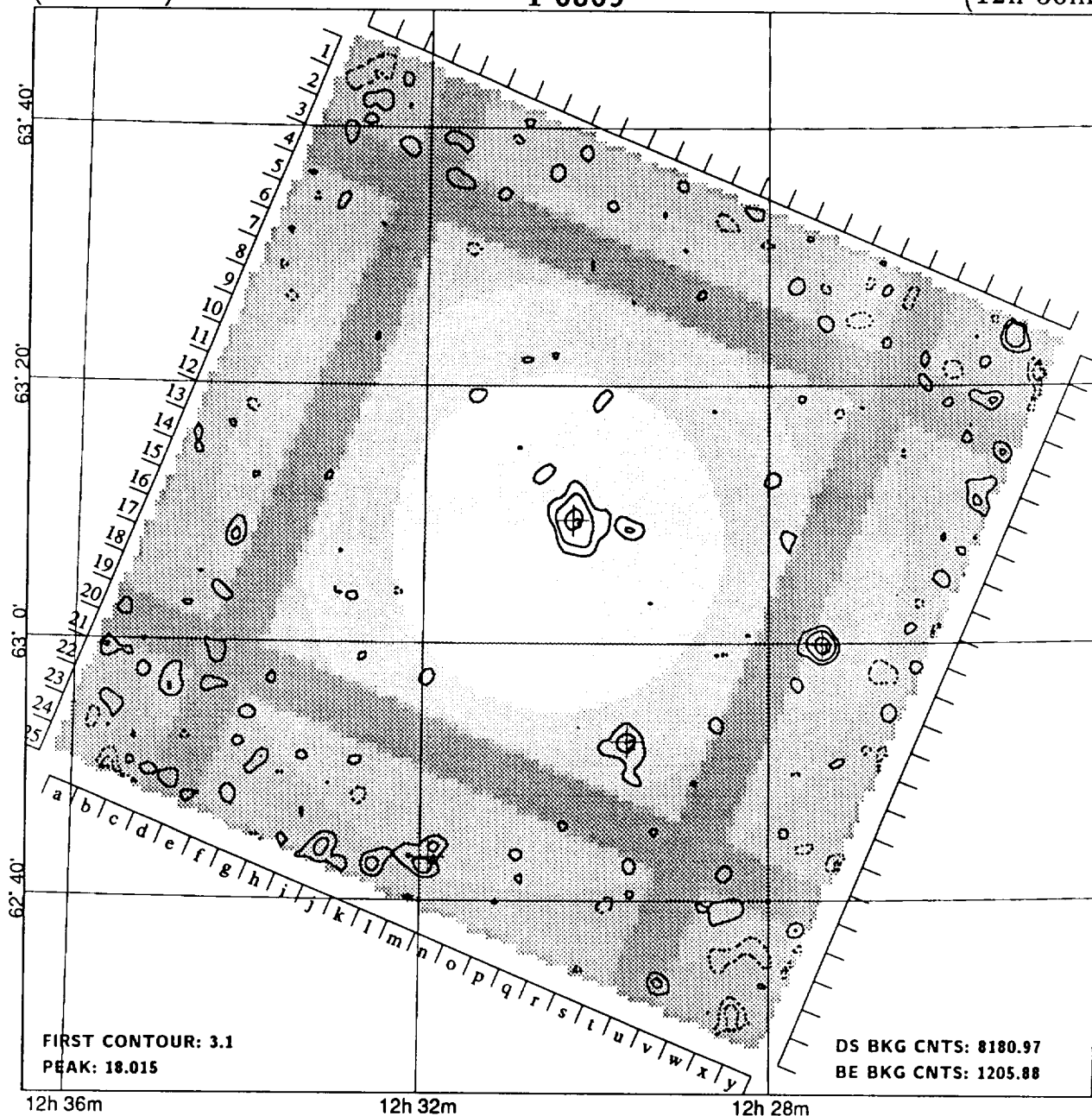
NH:  $2.3E+20$   
 REF/ID: G  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2747	1L	12 28 22.2	11 16 33	48	*0.0226	0.0029	157.8	67.2	7.8	1.4	601	31.8	1
2756	2L	12 29 23.5	11 45 45	41	0.0047	0.0013	60.0	108.0	3.6	157.1	0	12.2	

(12h 30m)

I 6869

(12h 30m)



A1557, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $12^h 30^m 24.0^s$   $63^\circ 06' 59''$  (B1950)  
 $12^h 32^m 39.8^s$   $62^\circ 50' 27''$  (J2000)  
 $l: 126.59$   $b: 54.15$

DATE: 1980/113 - 1980/113  
 LIVETIME: 6629.5s  
 ROLL ANGLE:  $22.6^\circ$

NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

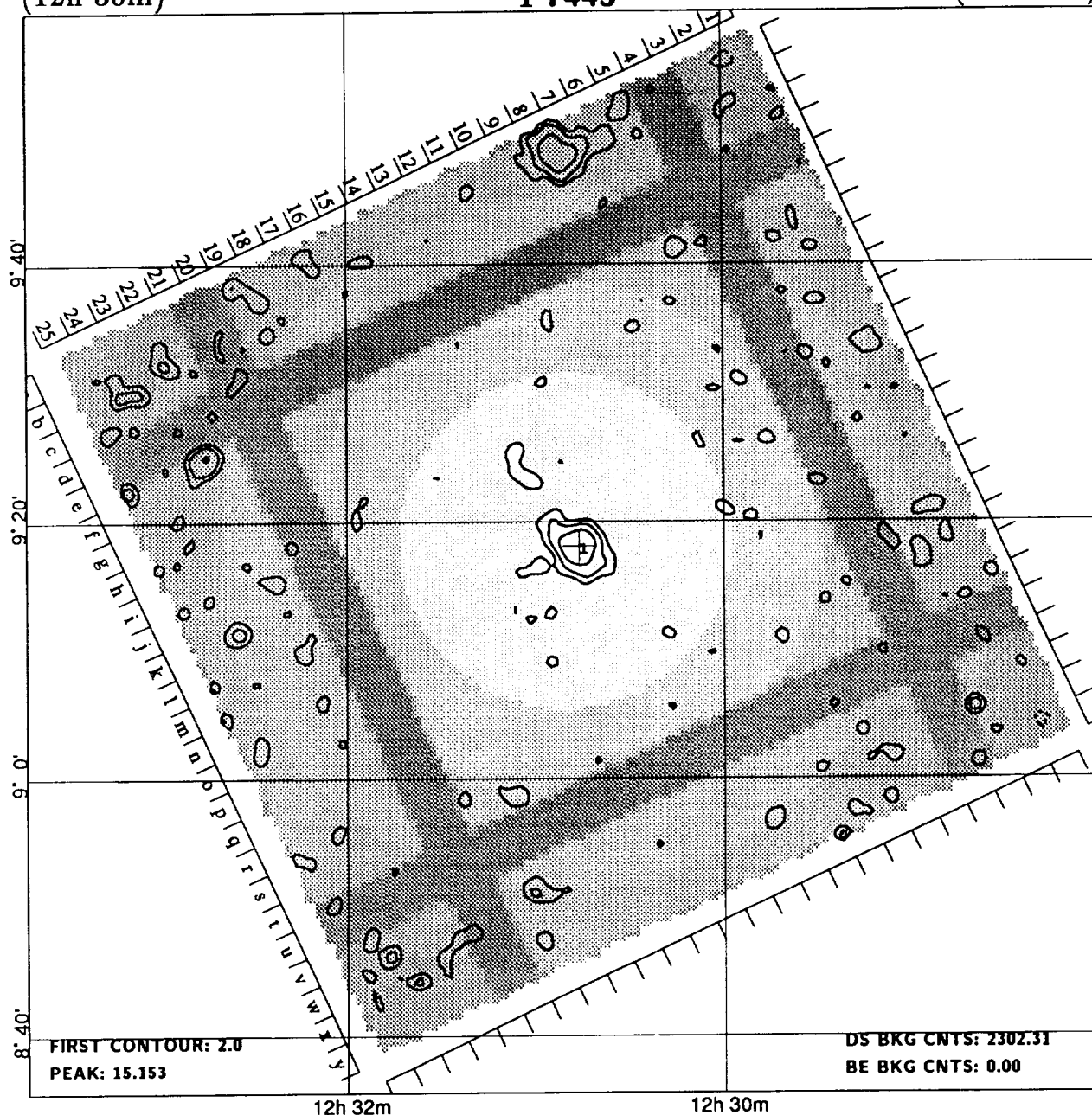
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2736	1	12 27 23.1	62 59 53	51	*0.0113	0.0022	35.4	12.6	5.1	0.9	702	21.5	H
2762	2	12 29 37.6	62 52 22	53	0.0077	0.0018	28.9	19.1	4.2	1.1	0	15.2	H
2766	3	12 30 16.3	63 09 33	35	0.0140	0.0020	68.3	23.7	7.1	1.5	0	2.7	H
2774	4	12 31 54.1	62 43 22	61	0.0080	0.0022	21.7	15.3	3.6	1.1	0	25.7	



(12h 30m)

I 7445

(12h 30m)



## WOLF 424, RADIO STAR

FIELD CENTER: 12<sup>h</sup>30<sup>m</sup>51.0<sup>s</sup> 09°17'35" (B1950)12<sup>h</sup>33<sup>m</sup>23.2<sup>s</sup> 09°01'03" (J2000)

l: 288.84 b: 71.39

DATE: 1980/171 - 1980/171

LIVETIME: 1865.6s

ROLL ANGLE: 65.1°

NH: 1.7E+20

REF/ID:

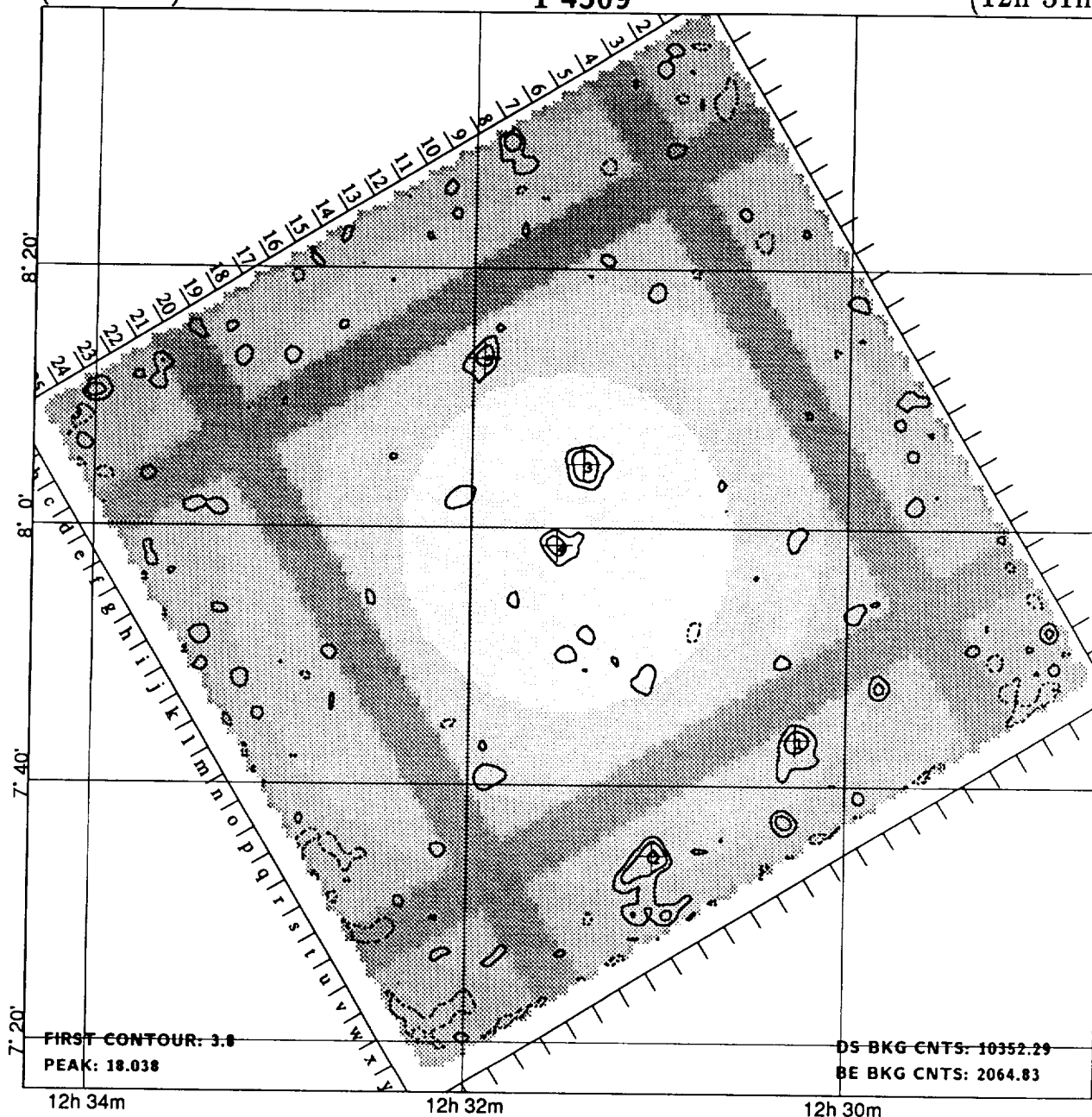
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2769	1L	12 30 46.1	09 18 07	34	0.0385	0.0076	53.3	24.7	5.0	1.5	0	1.3		

(12h 31m)

I 4309

(12h 31m)



## VIRGO CLUSTER FOLLOW-UP: NGC 4526

FIELD CENTER:  $12^h 31^m 30.0^s$   $07^\circ 57' 59''$  (B1950)  
 $12^h 34^m 02.4^s$   $07^\circ 41' 28''$  (J2000)  
 $l: 290.16$   $b: 70.13$

DATE: 1979/190 - 1979/190  
 LIVETIME: 8388.8s  
 ROLL ANGLE:  $58.9^\circ$

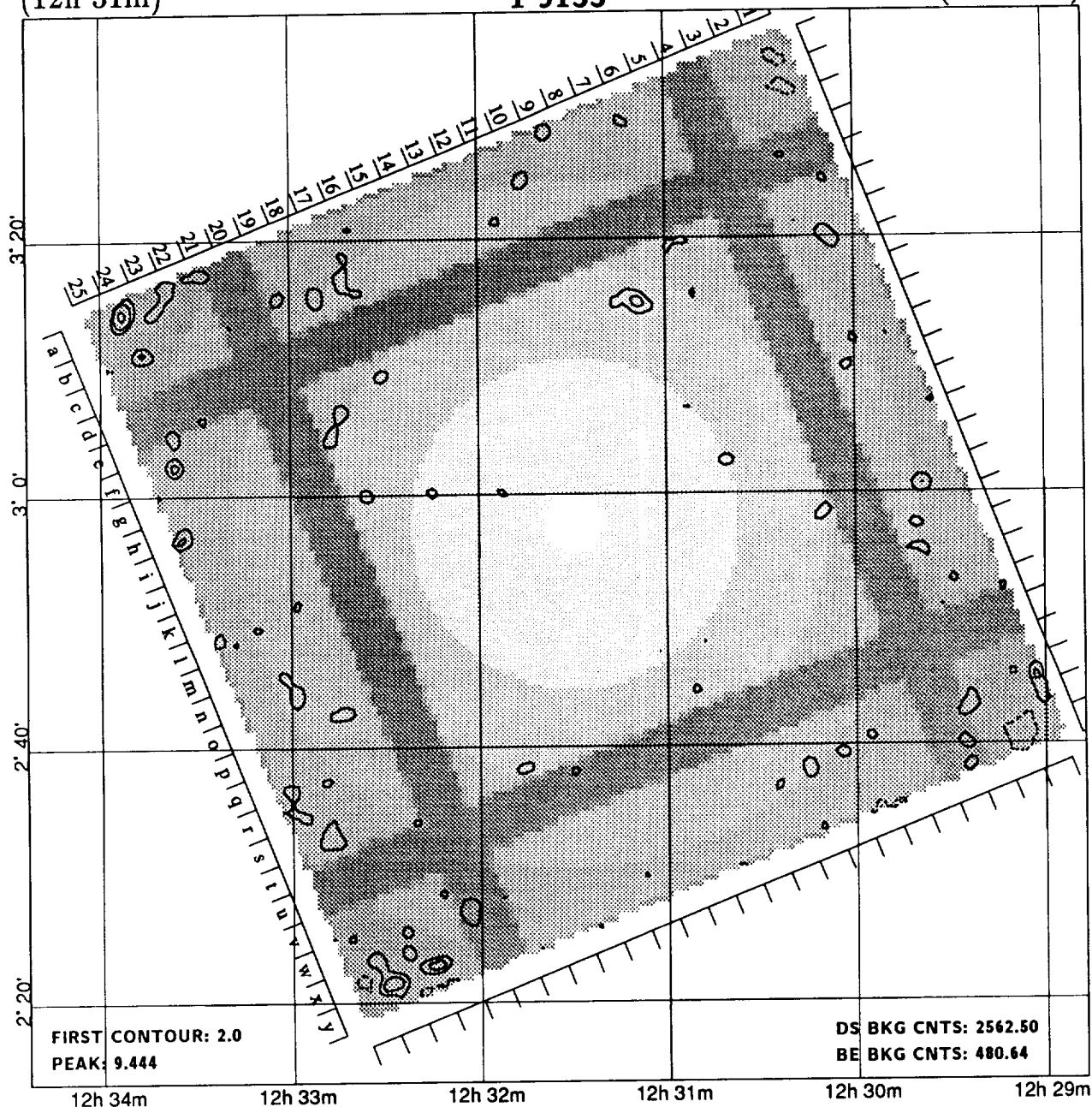
NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2765	1	12 30 16.0	07 43 35	56	*0.0071	0.0018	26.8	17.2	4.0	1.1	501	23.4	AH	
2770	2	12 31 00.8	07 34 30	51	0.0112	0.0022	40.3	20.7	5.2	1.8	0	24.4	H	
2772	3	12 31 24.3	08 04 54	41	0.0094	0.0016	55.3	31.7	5.9	1.0	0	7.0	AH	
2773	4	12 31 32.5	07 58 36	35	0.0062	0.0014	38.9	34.1	4.6	0.8	0	0.8	H	
2776	5	12 31 56.5	08 13 04	52	0.0067	0.0015	32.7	23.3	4.4	0.9	100	16.9	H	

(12h 31m)

I 9133

(12h 31m)



CAREFULLY SELECTED Sbc GALAXIES: NGC 4527

FIELD CENTER:  $12^{\text{h}}31^{\text{m}}35.4^{\text{s}}$   $02^{\circ}55'41''$  (B1950)  
 $12^{\text{h}}34^{\text{m}}08.7^{\text{s}}$   $02^{\circ}39'10''$  (J2000)  
 $l$ : 292.60  $b$ : 65.18

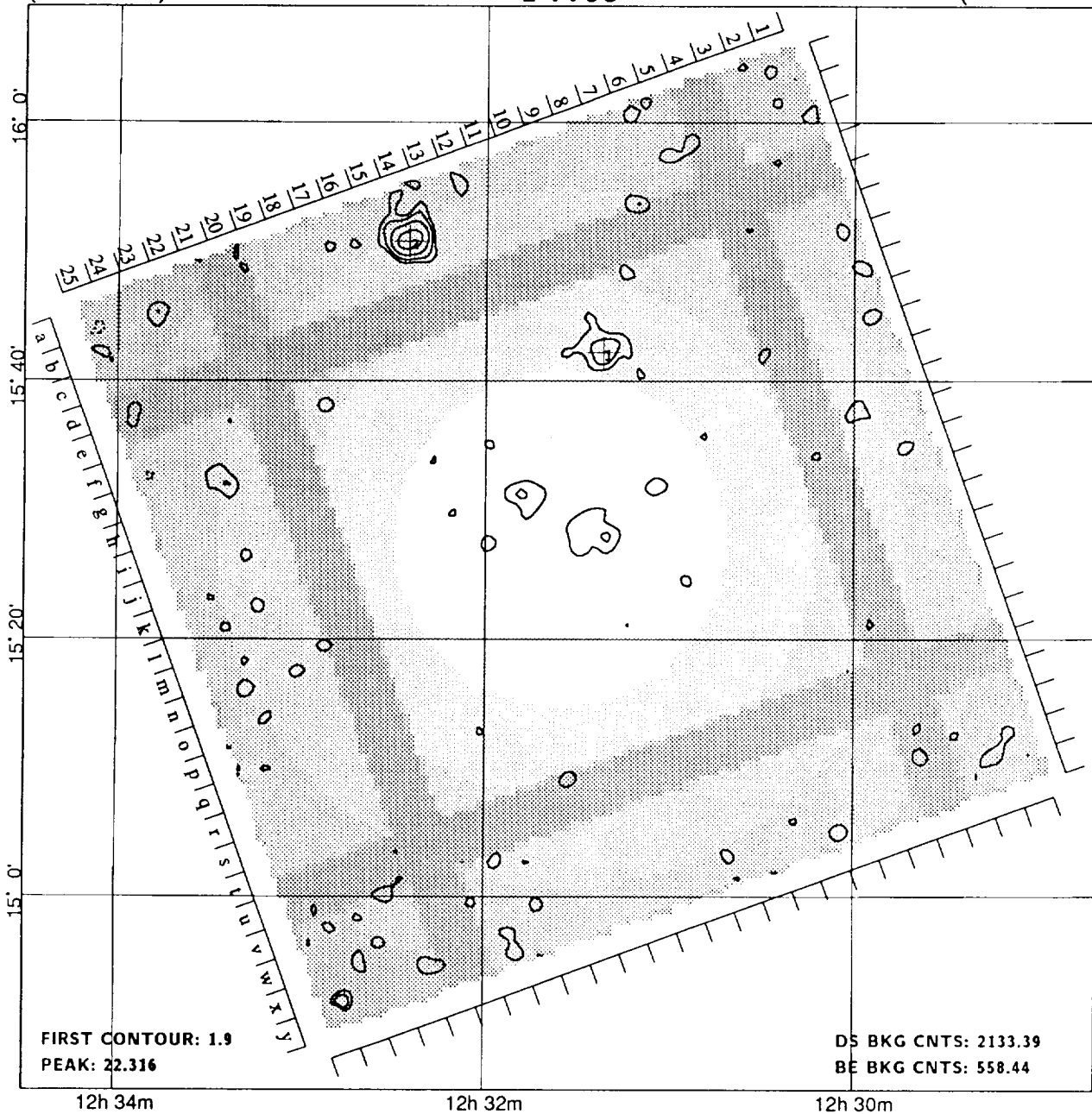
DATE: 1980/197 - 1980/197  
 LIVETIME: 2076.5s  
 ROLL ANGLE:  $68.3^{\circ}$

NH:  $1.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 31m)

I 7795

(12h 31m)



## A1560, CLUSTERS OF GALAXIES SURVEY

FIELD CENTER:  $12^{\text{h}}31^{\text{m}}36.0^{\text{s}}$   $15^{\circ}26'59''$  (B1950)  
 $12^{\text{h}}34^{\text{m}}07.1^{\text{s}}$   $15^{\circ}10'28''$  (J2000)  
 $\ell$ : 283.44  $b$ : 77.39

DATE: 1980/190 - 1980/190

LIVETIME: 1728.8s

ROLL ANGLE: 70.2°

NH:  $2.3\text{E}+20$ 

REF/ID: !

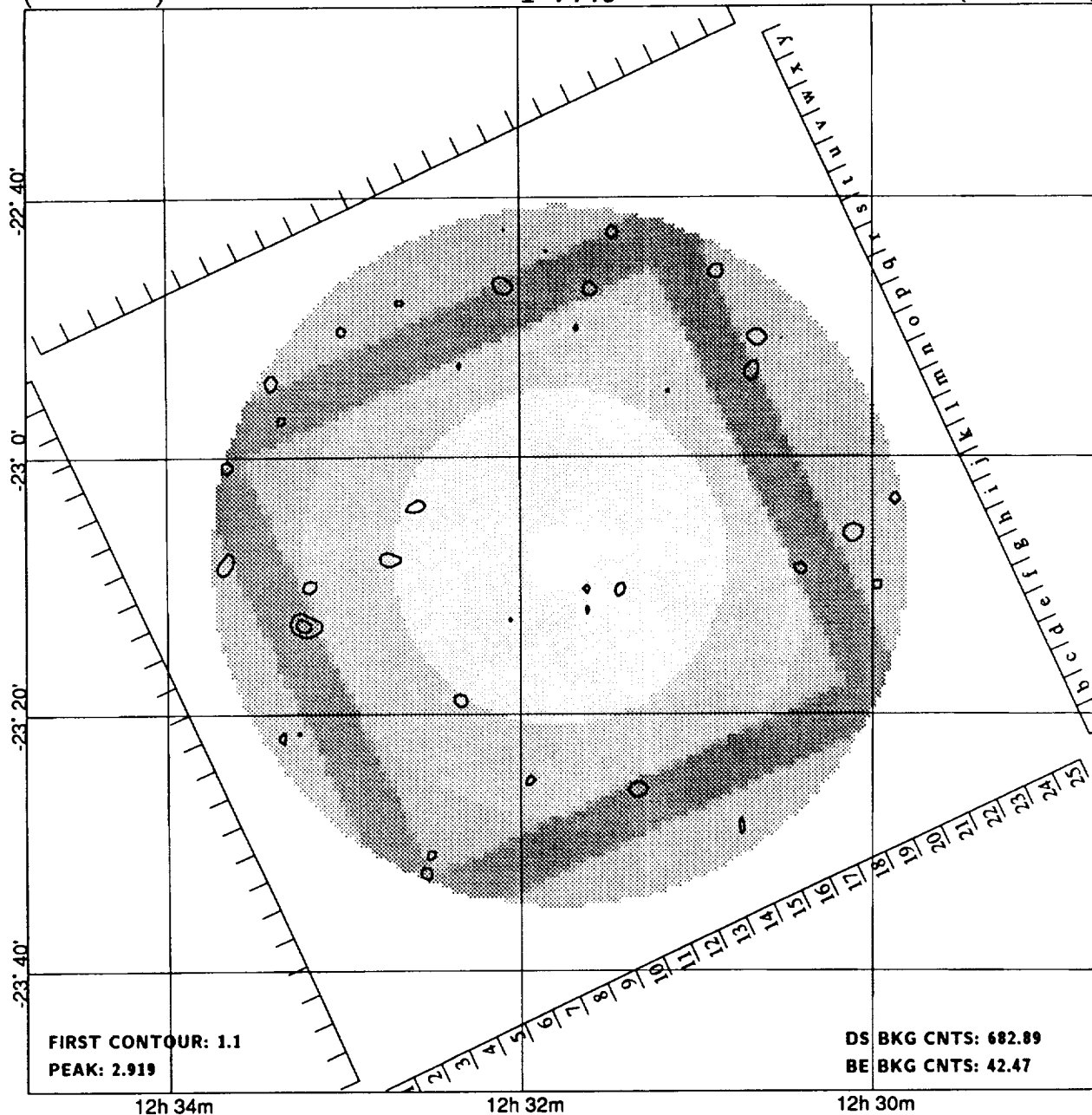
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2771	1	12 31 21.6	15 42 12	52	0.0221	0.0052	22.7	5.3	4.3	1.1	0	15.4	H	
2779	2	12 32 25.3	15 50 47	50	0.071	0.010	50.8	4.2	6.9	1.2	0	26.7	H	

(12h 31m)

I 4449

(12h 31m)



## BETA CRV, CORRELLATION OF X RAYS WITH STELLAR WIND AND ROTATION

FIELD CENTER:  $12^h 31^m 45.0^s$   $-23^\circ 07' 13''$  (B1950)  
 $12^h 34^m 22.9^s$   $-23^\circ 23' 45''$  (J2000)  
 $l: 297.87$   $b: 39.31$

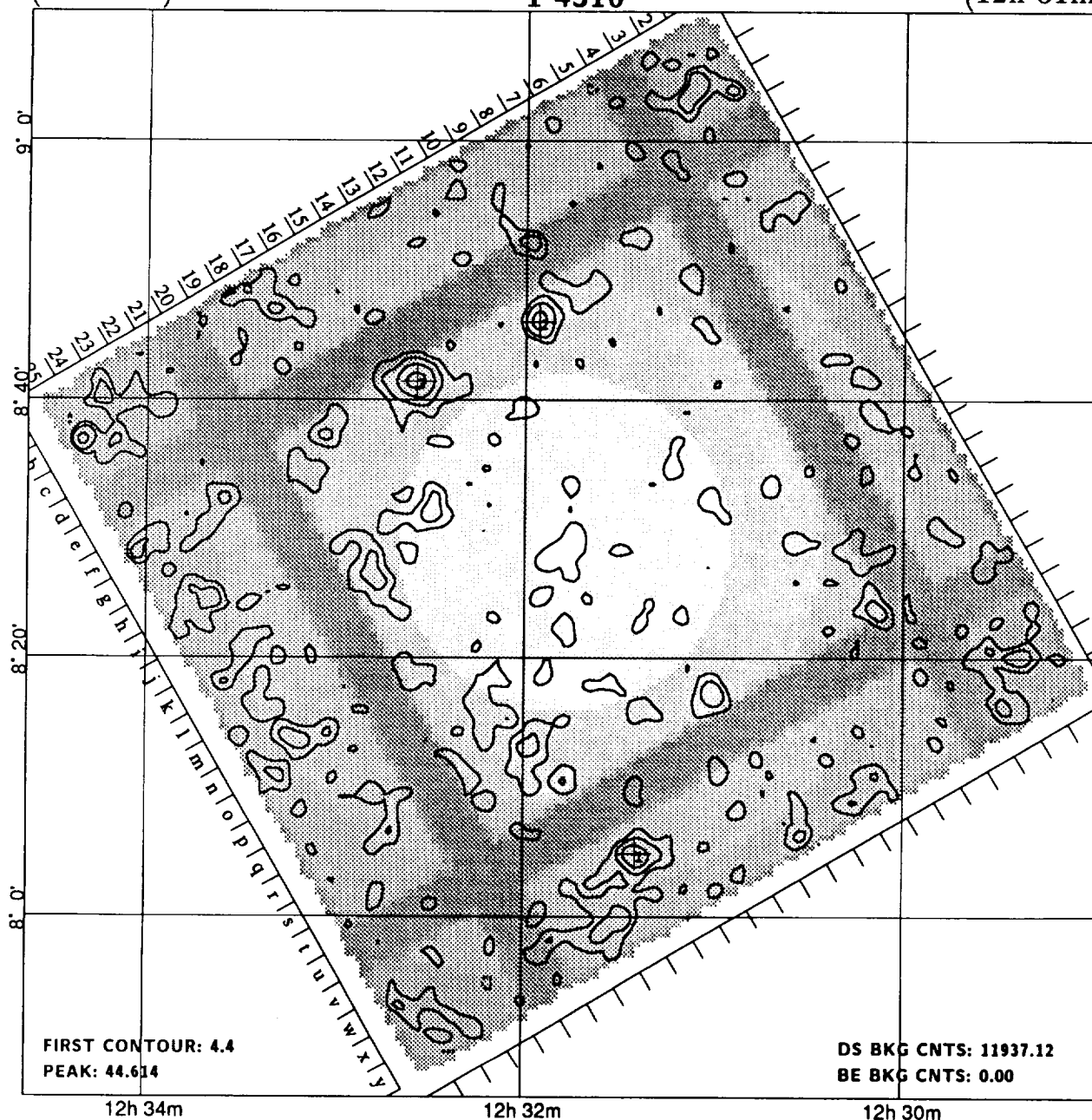
DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 553.4s  
 ROLL ANGLE:  $-115.0^\circ$

NH:  $6.4E+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 31m)

I 4310

(12h 31m)



## VIRGO CLUSTER FOLLOW-UP: NGC 4535

FIELD CENTER:  $12^{\text{h}}31^{\text{m}}48.0^{\text{s}}$   $08^{\circ}27'59''$  (B1950)  
 $12^{\text{h}}34^{\text{m}}20.3^{\text{s}}$   $08^{\circ}11'28''$  (J2000)  
 $l: 290.08$   $b: 70.63$

DATE: 1980/177 - 1980/178  
 LIVETIME: 9673.0s  
 ROLL ANGLE:  $59.8^{\circ}$

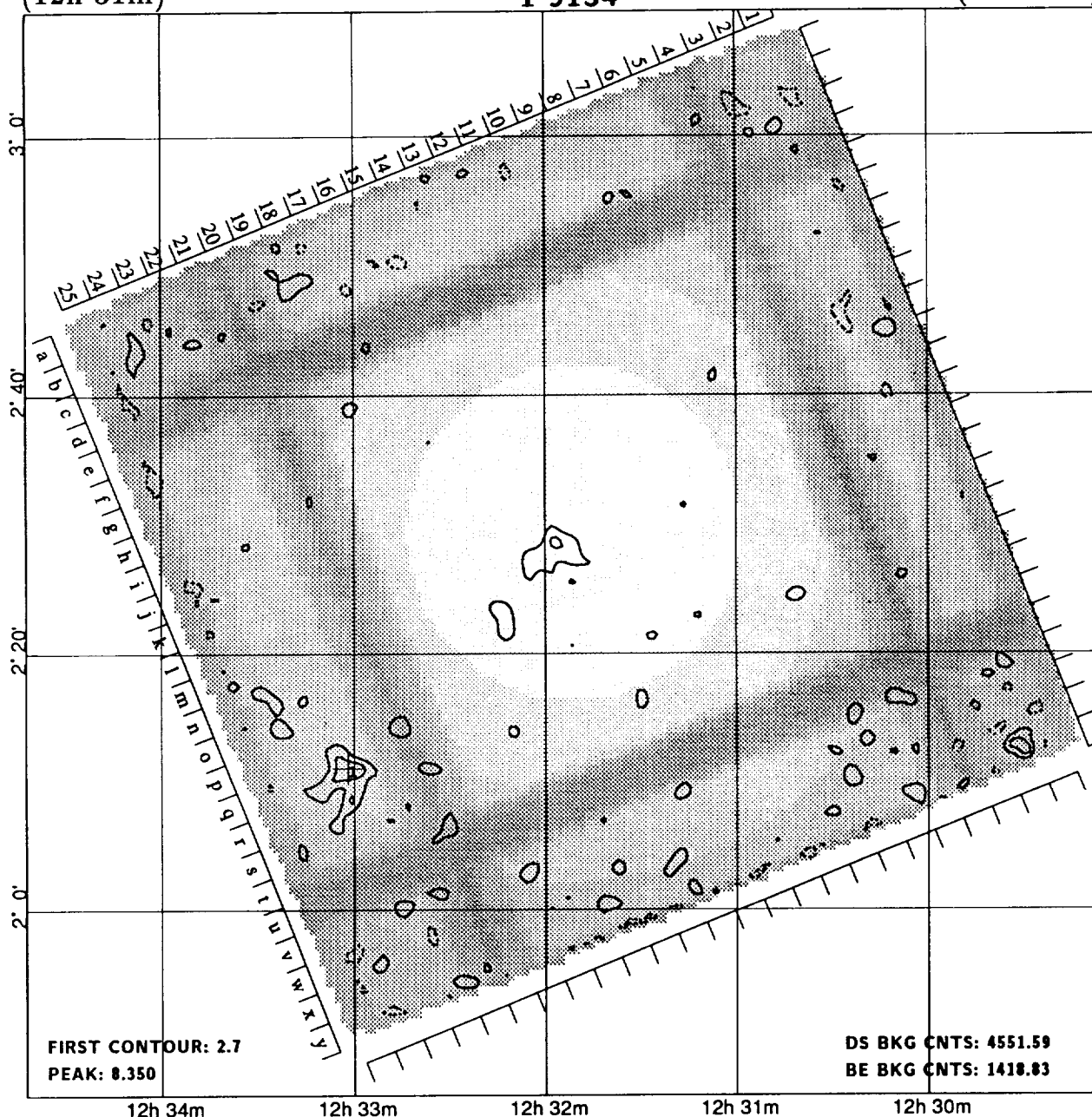
NH:  $1.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2772	1L	12 31 24.3	08 04 52	50	0.0137	0.0026	57.7	29.3	5.0	2.8	0	24.0	A	
2775	2L	12 31 55.7	08 46 02	50	0.0122	0.0021	65.5	25.5	5.7	0.9	100	18.2		
2780	3L	12 32 34.7	08 41 26	48	*0.0218	0.0029	117.7	47.3	7.5	1.5	401	17.9		

(12h 31m)

I 9134

(12h 31m)



CAREFULLY SELECTED Sbc GALAXIES: NGC 4536

FIELD CENTER:  $12^{\text{h}}31^{\text{m}}54.0^{\text{s}}$   $02^{\circ}27'41''$  (B1950)  
 $12^{\text{h}}34^{\text{m}}27.3^{\text{s}}$   $02^{\circ}11'10''$  (J2000)  
 $l: 292.95$   $b: 64.73$

DATE: 1980/196 - 1980/196  
 LIVETIME: 3688.3s  
 ROLL ANGLE:  $68.2^{\circ}$

NH:  $1.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

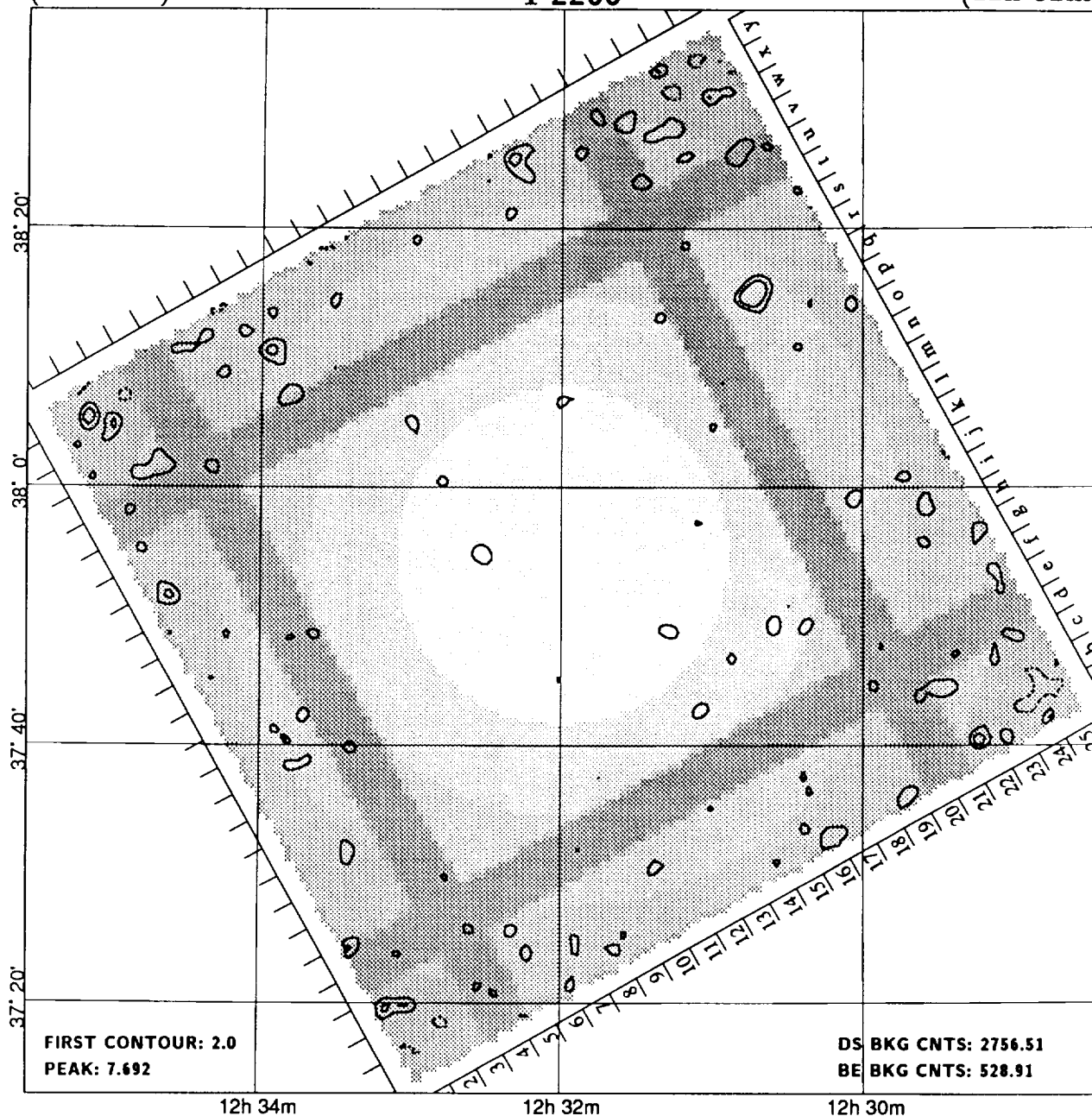
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2785	1	12 33 01.9	02 11 04	56	0.0138	0.0036	21.6	9.4	3.9	1.8	100	23.6	H



(12h 32m)

I 2266

(12h 32m)



## STELLAR SURVEY-CATAclysmic VARIABLES: AM CVN

FIELD CENTER:  $12^{\text{h}}32^{\text{m}}00.0^{\text{s}}$   $37^{\circ}54'59''$  (B1950)  
 $12^{\text{h}}34^{\text{m}}26.2^{\text{s}}$   $37^{\circ}38'28''$  (J2000)  
 $l$ : 140.67  $b$ : 78.90

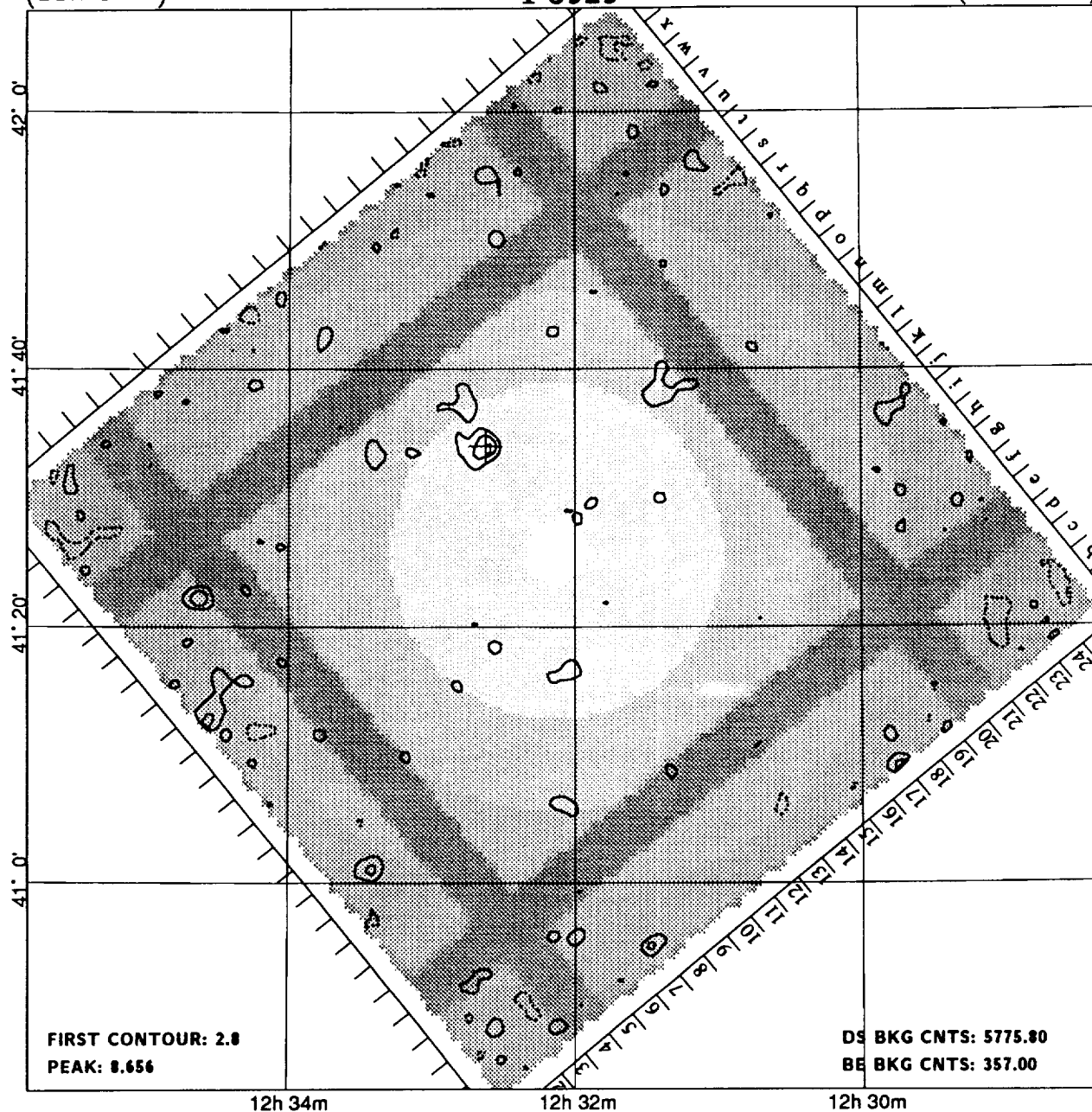
DATE: 1979/347 - 1979/347  
 LIVETIME: 2233.7s  
 ROLL ANGLE: -119.3°

NH: 1.3E+20  
 REF/ID:  
 FIELD FLAGS:

(12h 32m)

I 3929

(12h 32m)



## CLASSICAL DOUBLES IN RICH CLUSTERS

FIELD CENTER:  $12^{\text{h}}32^{\text{m}}05.0^{\text{s}}$   $41^{\circ}26'04''$  (B1950)  
 $12^{\text{h}}34^{\text{m}}30.2^{\text{s}}$   $41^{\circ}09'33''$  (J2000)  
 $l: 135.80$   $b: 75.54$

DATE: 1979/342 - 1979/342  
 LIVETIME: 4680.4s  
 ROLL ANGLE:  $-129.2^{\circ}$

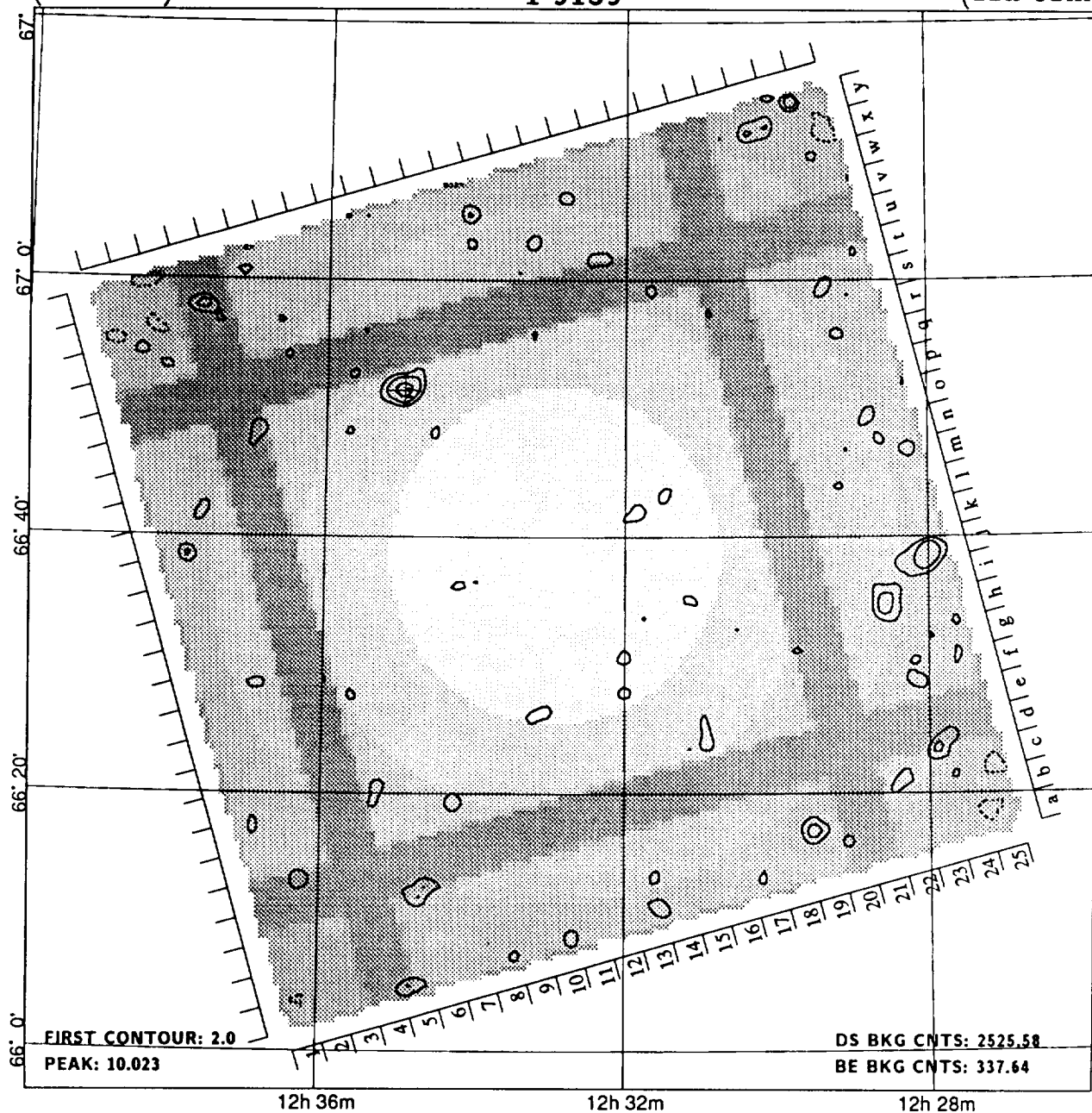
NH:  $1.7\text{E}+20$   
 REF/ID: I  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2781	1	12 32 37.5	41 34 04	42	0.0092	0.0021	28.7	15.3	4.3	0.9	0	9.7	

(12h 32m)

I 9159

(12h 32m)



## S-TYPE MARKARIAN GALAXIES: MK 217

FIELD CENTER:  $12^h 32^m 51.4^s$   $66^\circ 39' 06''$  (B1950)  
 $12^h 35^m 02.4^s$   $66^\circ 22' 35''$  (J2000)  
 $l: 125.52$   $b: 50.67$

DATE: 1980/358 - 1980/358  
 LIVETIME: 2046.6s  
 ROLL ANGLE:  $-105.7^\circ$

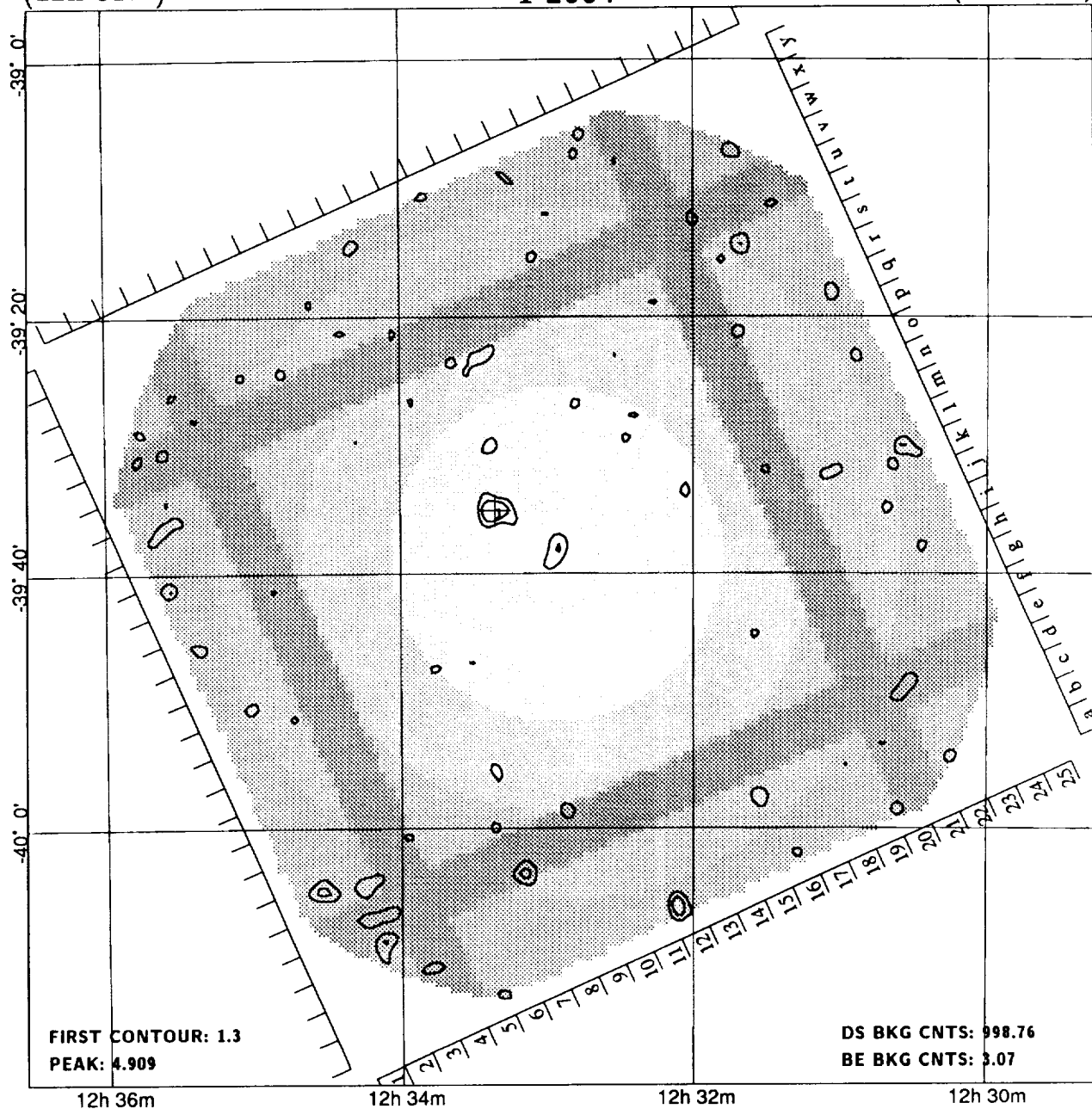
NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2800	1	12 34 57.7	66 51 24	51	0.0232	0.0050	26.1	5.9	4.6	0.9	300	17.5	H	

(12h 32m)

I 2664

(12h 32m)



## SEYFERT GALAXY SURVEY: NGC4507

FIELD CENTER:  $12^h 32^m 54.0^s$   $-39^\circ 37' 59''$  (B1950)  
 $12^h 35^m 36.0^s$   $-39^\circ 54' 31''$  (J2000)  
 $l: 299.64$   $b: 22.86$

DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 809.3s  
 ROLL ANGLE:  $-114.2^\circ$

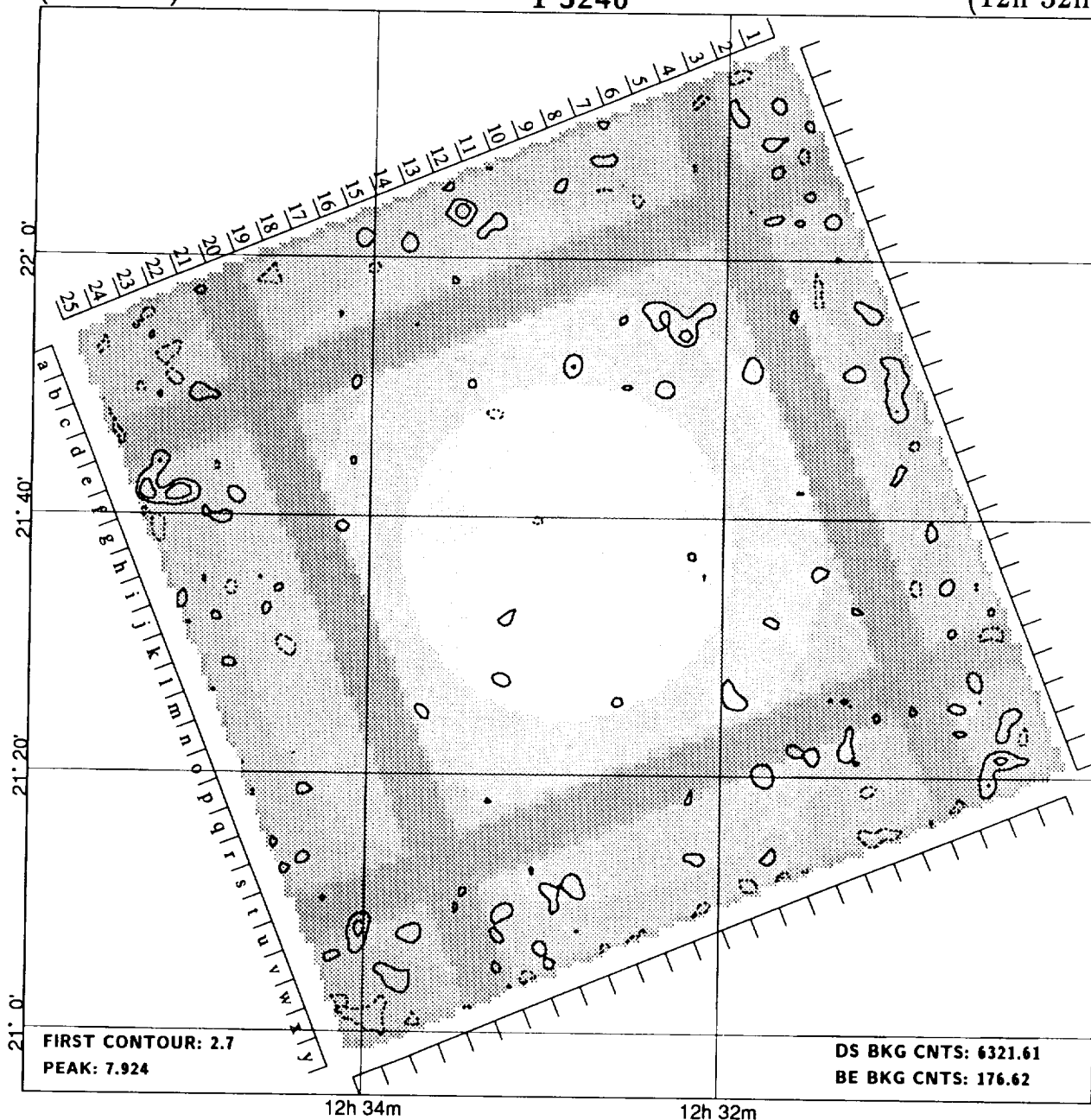
NH:  $7.1E+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2788	1	12 33 21.3	-39 35 09	45	0.0300	0.0078	17.1	2.9	3.8	0.8	0	6.1	H

(12h 32m)

I 3240

(12h 32m)



## 3C274.1: DISTANT CLUSTERS ASSOCIATED WITH QSO'S

FIELD CENTER:  $12^{\text{h}}32^{\text{m}}54.0^{\text{s}}$   $21^{\circ}37'01''$  (B1950)  
 $12^{\text{h}}35^{\text{m}}23.8^{\text{s}}$   $21^{\circ}20'30''$  (J2000)  
 $l: 269.79$   $b: 83.16$

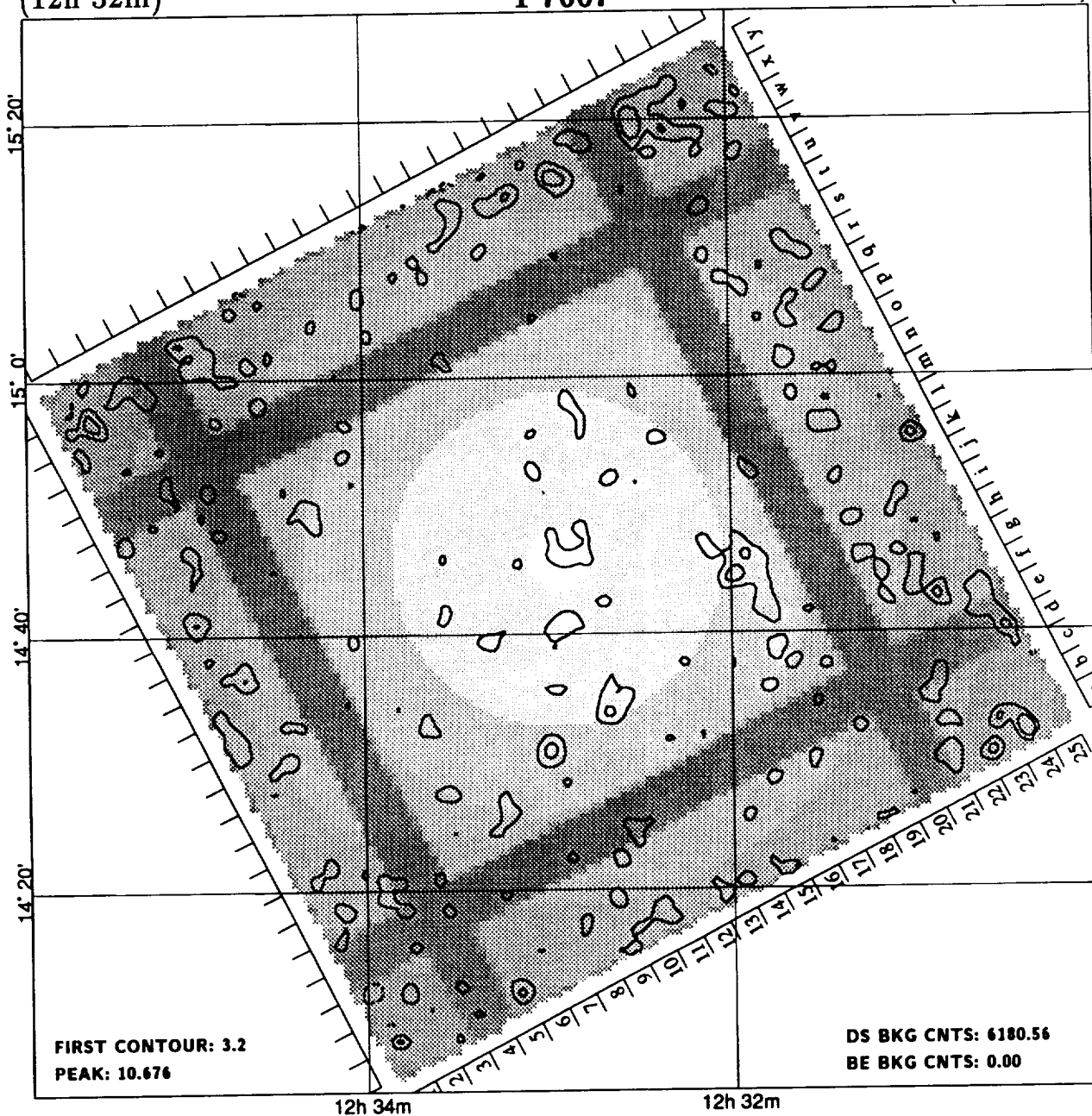
DATE: 1979/180 - 1979/180  
 LIVETIME: 5122.6s  
 ROLL ANGLE:  $68.0^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 32m)

I 7007

(12h 32m)



NGC 4548, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 32^m 55.2^s$   $14^\circ 46' 23''$  (B1950)  
 $12^h 35^m 26.3^s$   $14^\circ 29' 52''$  (J2000)  
 $l: 285.69$   $b: 76.83$

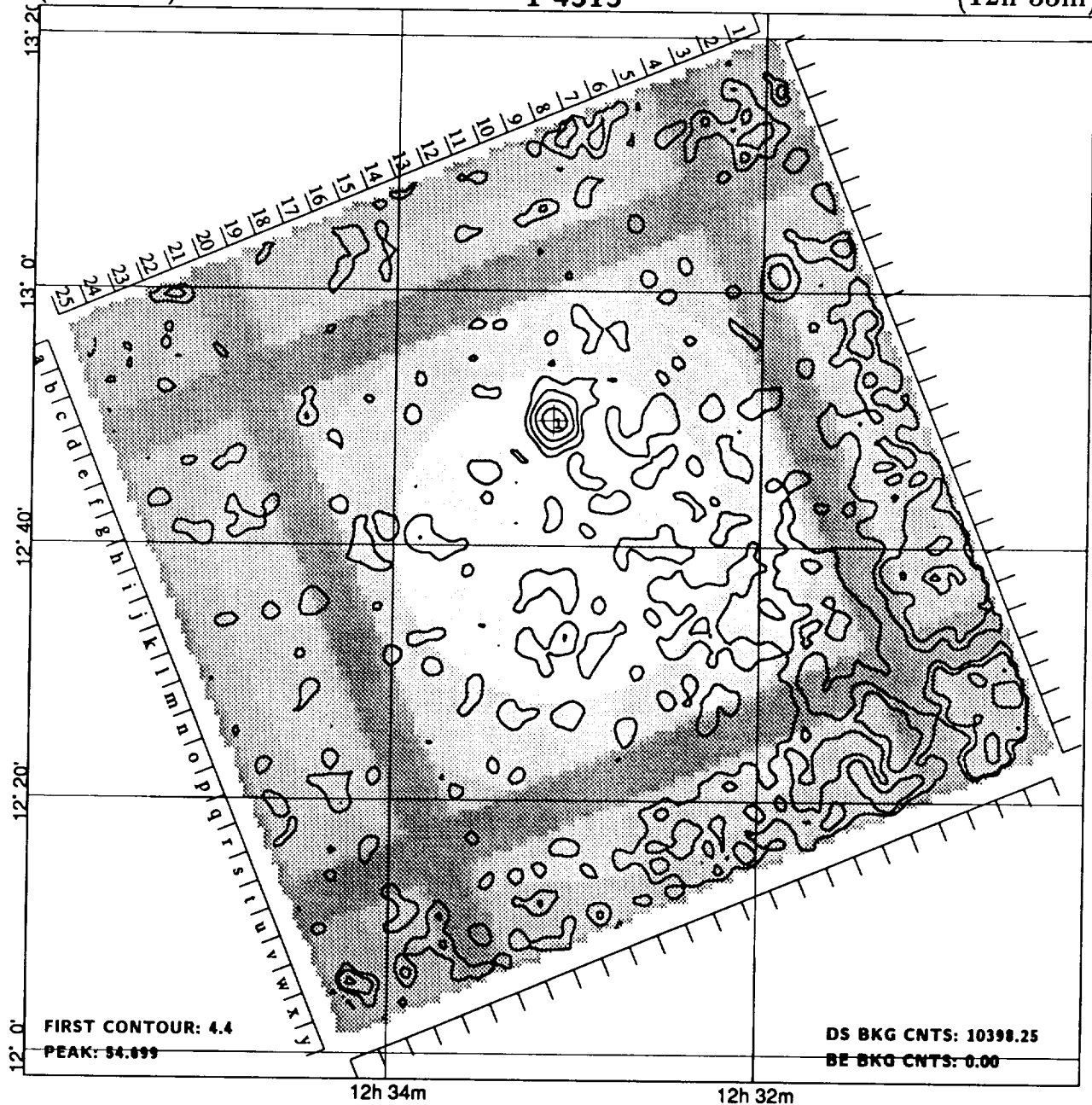
DATE: 1979/348 - 1979/348  
LIVETIME: 5008.3s  
ROLL ANGLE:  $-117.2^\circ$

NH:  $2.4E+20$   
REF/ID:  
FIELD FLAGS: L

(12h 33m)

I 4313

(12h 33m)



VIRGO CLUSTER FOLLOW-UP: NGC 4552 4551 4550

FIELD CENTER:  $12^{\text{h}} 33^{\text{m}} 06.0^{\text{s}}$   $12^{\circ} 39' 59''$  (B1950)  
 $12^{\text{h}} 35^{\text{m}} 37.5^{\text{s}}$   $12^{\circ} 23' 29''$  (J2000)  
 $l: 288.05$   $b: 74.80$

DATE: 1979/182 - 1979/182  
 LIVETIME: 8426.0s  
 ROLL ANGLE:  $67.6^{\circ}$

NH:  $2.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

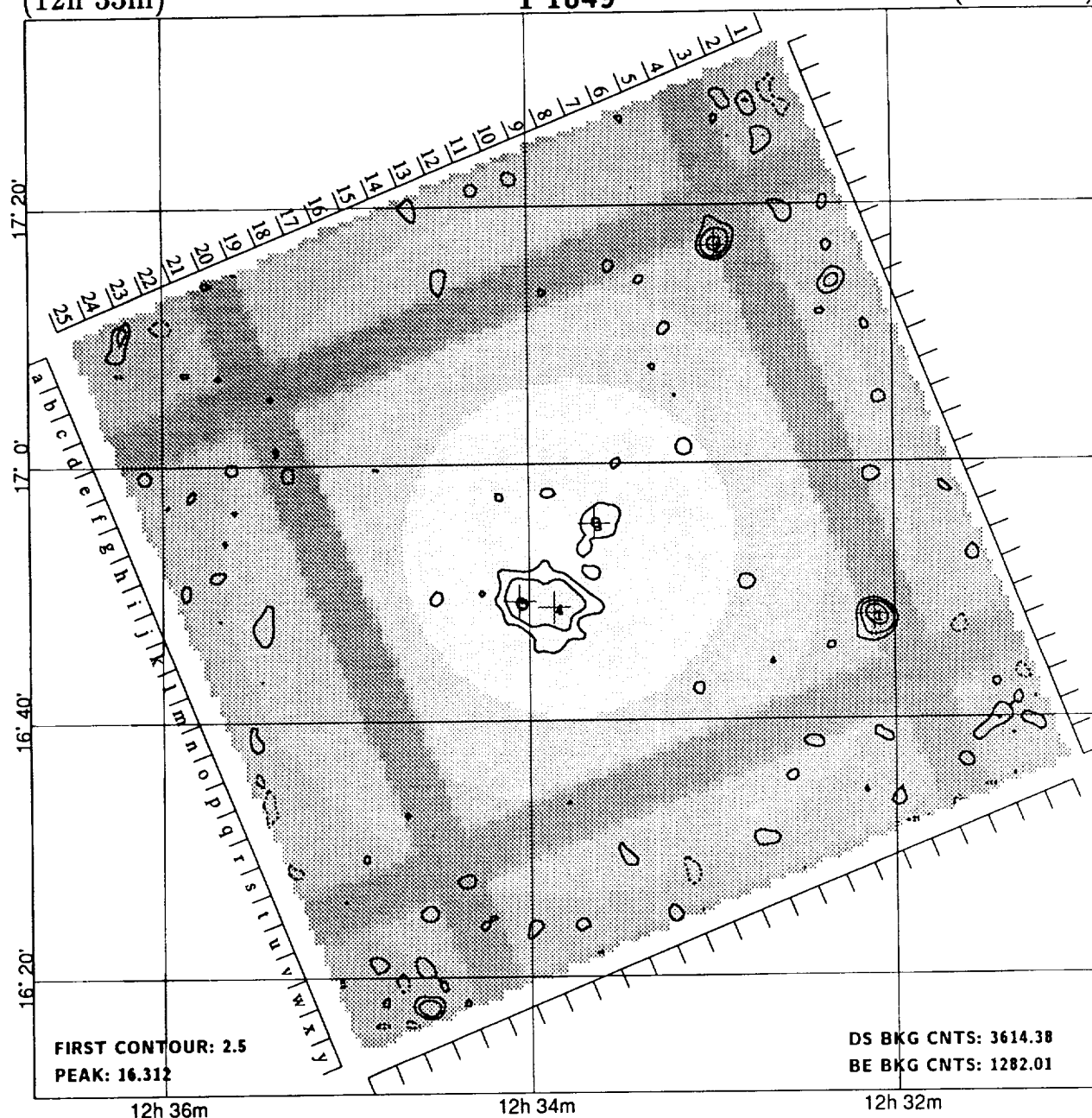
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2786	1L	12 33 08.0	12 49 47	38	0.0328	0.0032	186.7	60.3	10.0	1.4	0	9.8		G



(12h 33m)

I 1849

(12h 33m)



## A1569: X-RAY STUDY OF CLUSTERS OF GALAXIES

FIELD CENTER:  $12^{\text{h}}33^{\text{m}}48.0^{\text{s}}$   $16^{\circ}52'59''$  (B1950)  
 $12^{\text{h}}36^{\text{m}}18.7^{\text{s}}$   $16^{\circ}36'29''$  (J2000)  
 $l: 283.75$   $b: 78.91$

DATE: 1979/181 - 1979/181  
 LIVETIME: 2928.8s  
 ROLL ANGLE:  $67.9^{\circ}$

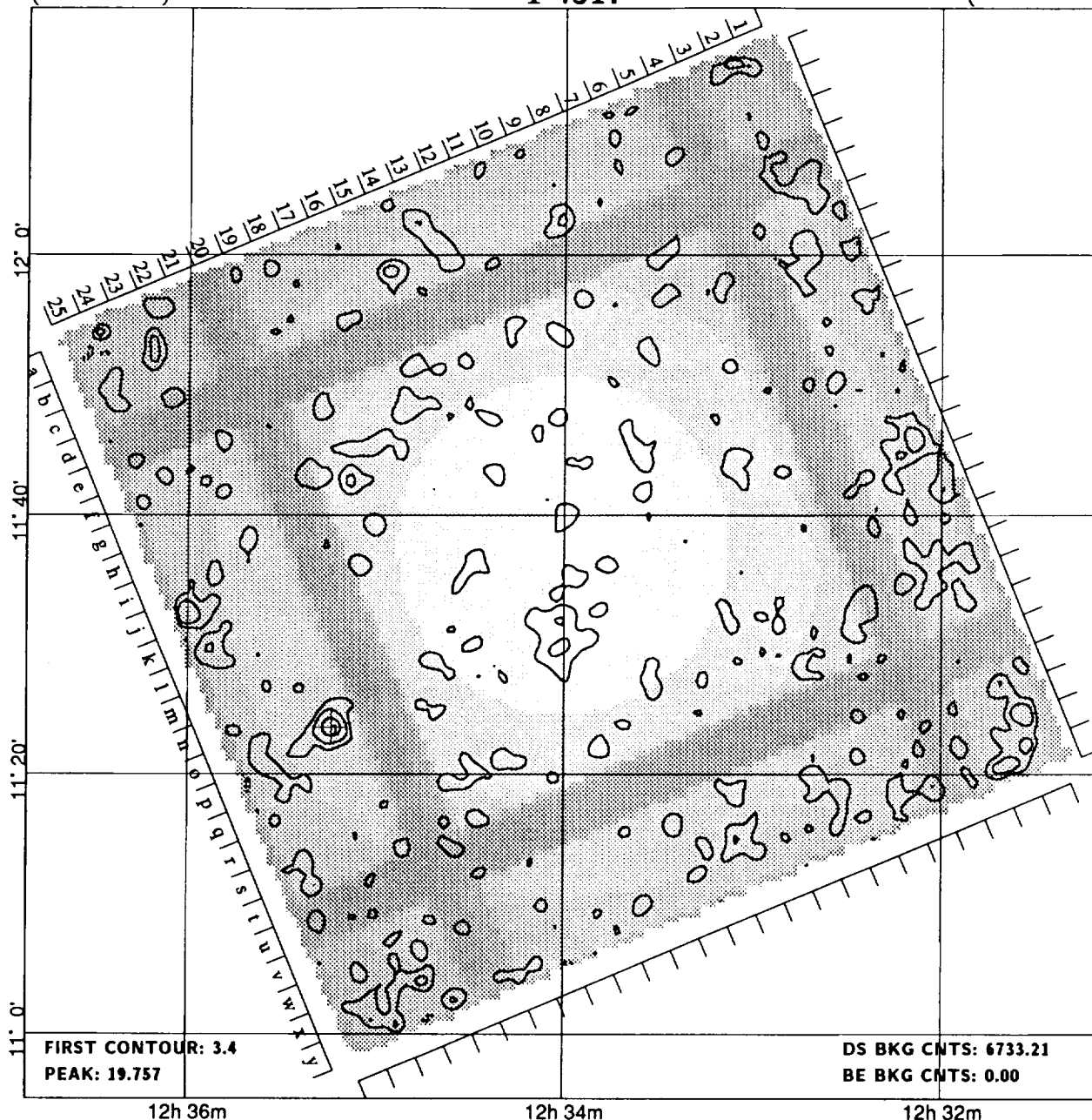
NH:  $2.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2777	1	12 32 06.6	16 48 07	51	*0.0244	0.0047	31.3	5.7	5.2	0.9	1008	24.6	H	
2783	2	12 32 58.2	17 16 47	51	*0.0208	0.0046	25.2	5.8	4.5	0.9	1106	26.4	H	
2791	3	12 33 38.5	16 55 17	37	0.0097	0.0027	20.8	13.2	3.6	1.0	0	3.2	H	
2792	4	12 33 51.8	16 48 51	36	0.0207	0.0035	43.3	11.7	5.8	3.3	0	4.0	H	
2794	5	12 34 03.3	16 49 21	41	0.0232	0.0037	48.1	11.9	6.2	3.3	0	5.1	H	CLG

(12h 34m)

I 4317

(12h 34m)



## VIRGO CLUSTER FOLLOW-UP: NGC 4568 4567 4564

FIELD CENTER:  $12^h 34^m 00.0^s$   $11^\circ 36' 59''$  (B1950)  
 $12^h 36^m 31.7^s$   $11^\circ 20' 29''$  (J2000)  
 $l: 289.70$   $b: 73.83$

DATE: 1979/182 - 1979/182  
 LIVETIME: 5456.1s  
 ROLL ANGLE:  $67.4^\circ$

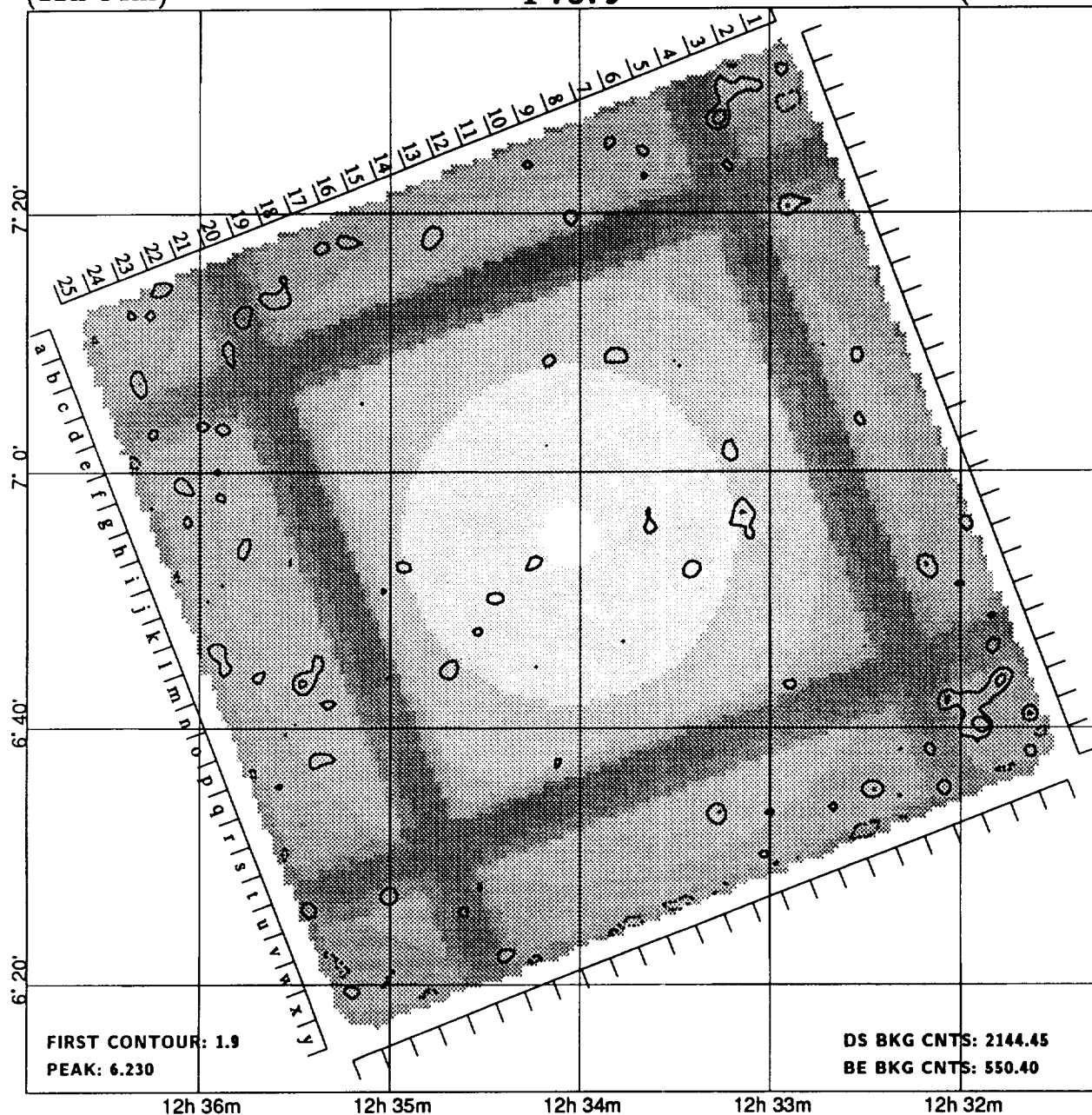
NH:  $2.4E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2802	1L	12 35 14.3	11 23 36	51	0.0169	0.0035	42.8	14.2	4.6	1.1	200	22.5		

(12h 34m)

I 7579

(12h 34m)



## IC 3576, NARROW LINE GALAXIES

FIELD CENTER:  $12^{\text{h}}34^{\text{m}}05.0^{\text{s}}$   $06^{\circ}53'47''$  (B1950)  
 $12^{\text{h}}36^{\text{m}}37.5^{\text{s}}$   $06^{\circ}37'17''$  (J2000)  
 $l$ : 292.53  $b$ : 69.19

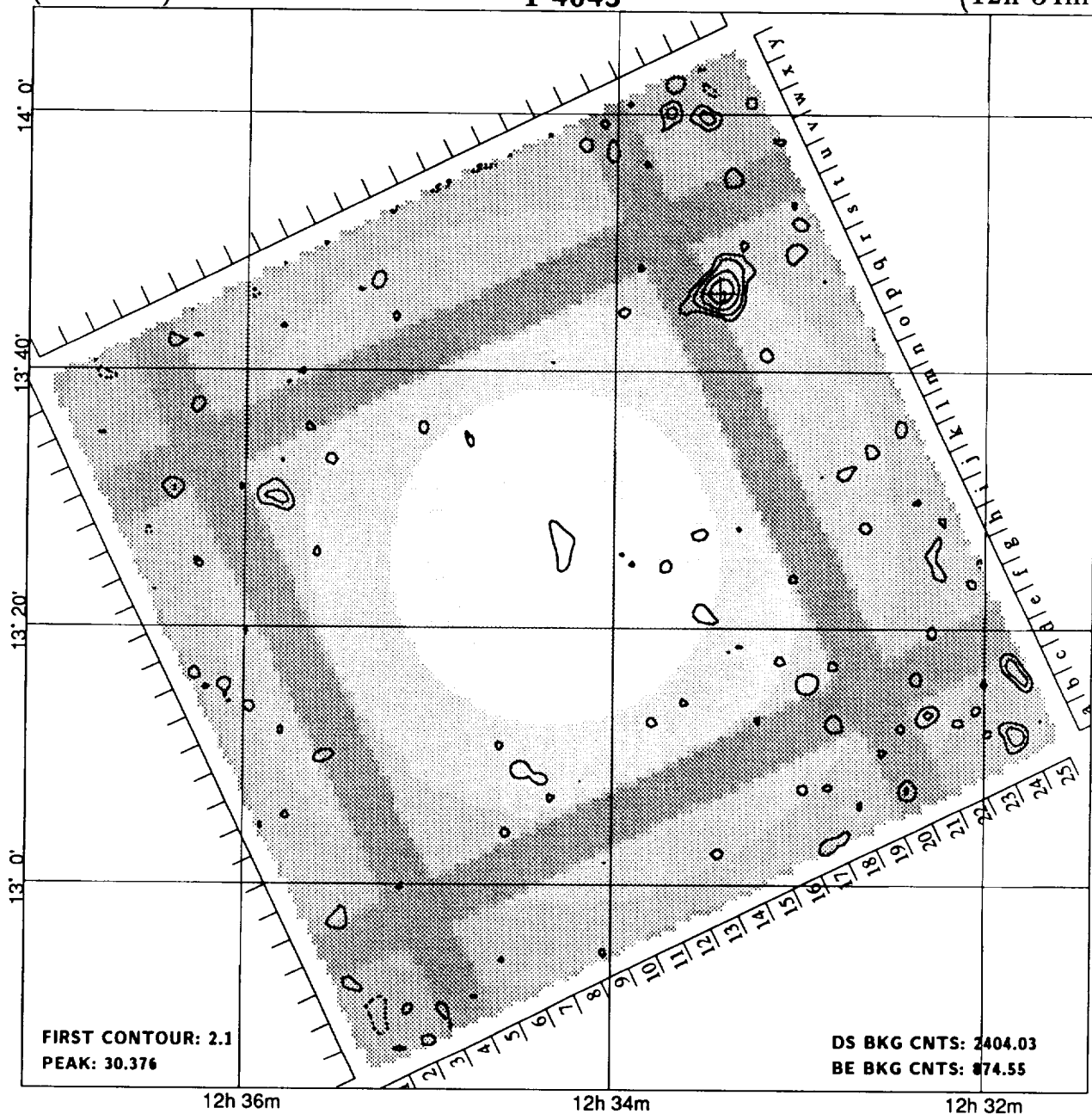
DATE: 1980/193 - 1980/193  
 LIVETIME: 1737.7s  
 ROLL ANGLE:  $68.9^{\circ}$

NH:  $1.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 34m)

I 4045

(12h 34m)



## NGC 4569 NUCLEUS

FIELD CENTER:  $12^{\text{h}}34^{\text{m}}18.0^{\text{s}}$   $13^{\circ}25'59''$  (B1950)  
 $12^{\text{h}}36^{\text{m}}49.3^{\text{s}}$   $13^{\circ}09'29''$  (J2000)  
 $l: 288.46$   $b: 75.62$

DATE: 1979/352 - 1979/352

NH: 2.5E+20

LIVETIME: 1948.1s

REF/ID:

ROLL ANGLE: -115.8°

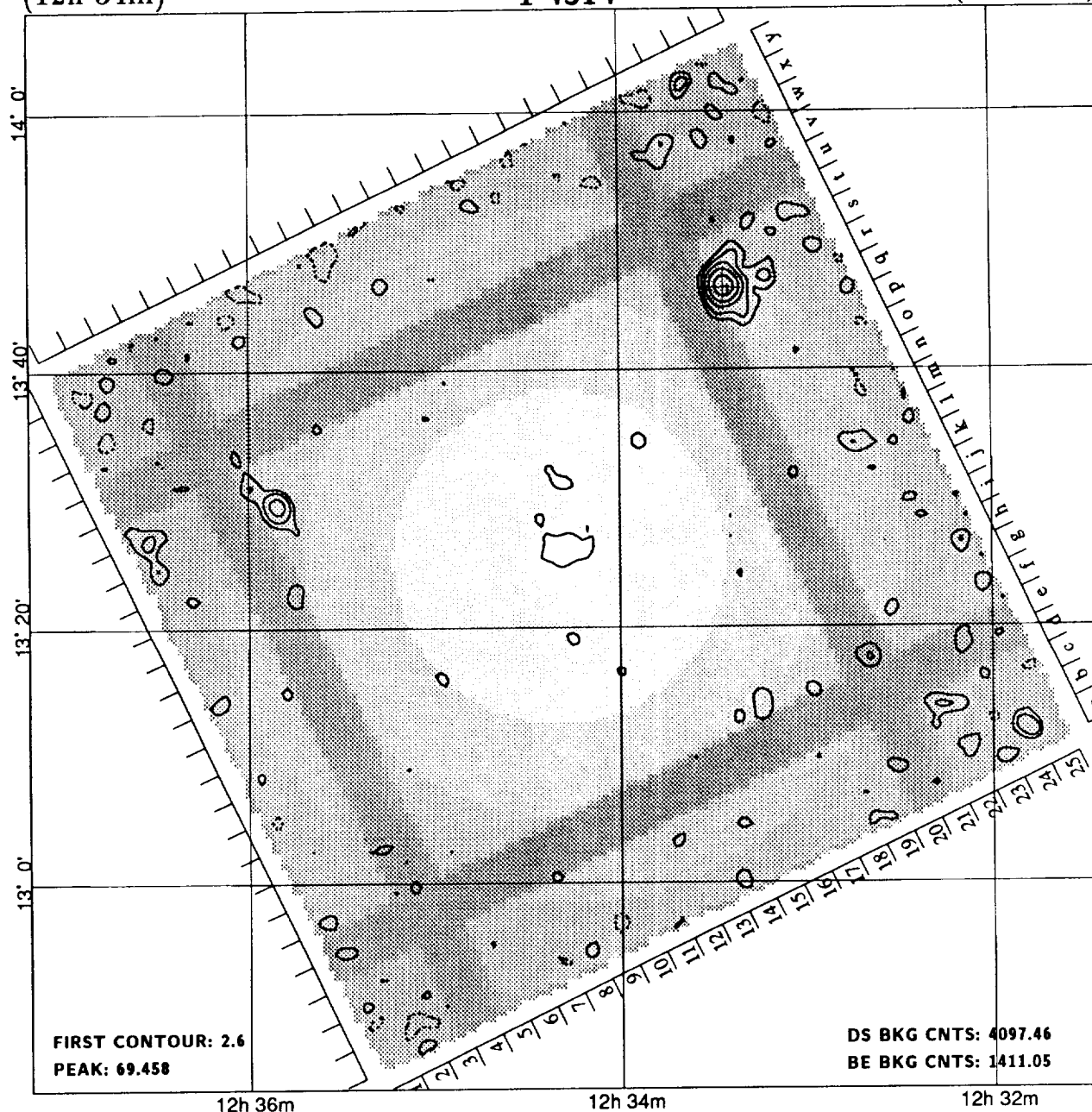
FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2789	1L	12 33 26.3	13 46 08	50	*0.092	0.017	78.9	11.1	5.3	1.2	703	23.7	A	

(12h 34m)

I 4314

(12h 34m)



## VIRGO CLUSTER FOLLOW-UP: NGC 4569

FIELD CENTER:  $12^h 34^m 18.0^s$   $13^\circ 25' 59''$  (B1950)  
 $12^h 36^m 49.3^s$   $13^\circ 09' 29''$  (J2000)  
 $l: 288.46$   $b: 75.62$

DATE: 1979/353 - 1979/353  
 LIVETIME: 3320.3s  
 ROLL ANGLE:  $-115.7^\circ$

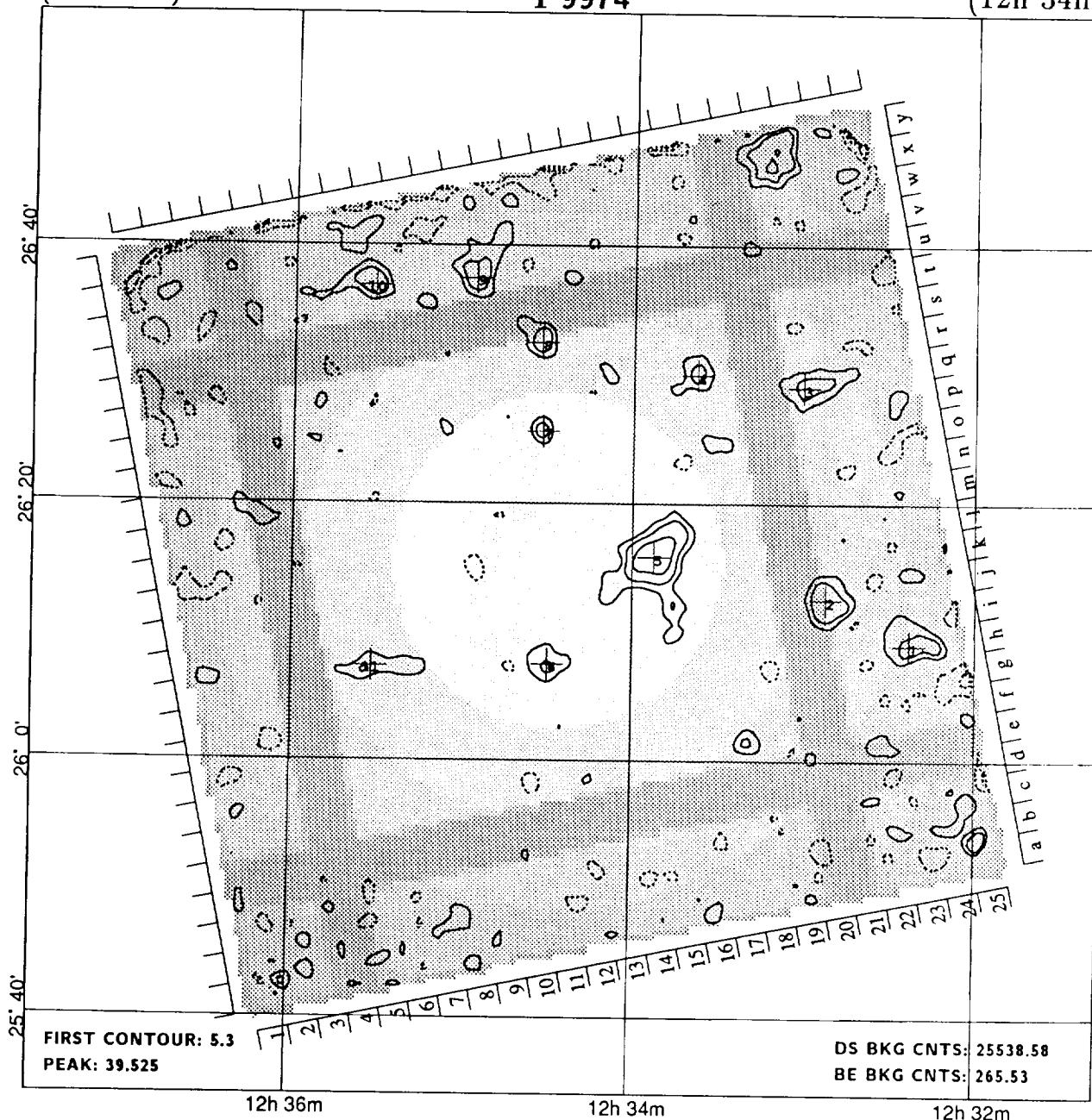
NH:  $2.5E+20$   
 REF/ID:  
 FIELD FLAGS: CLS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2789	1L	12 33 26.0	13 46 18	48	*0.114	0.012	164.2	6.8	9.0	1.2	704	23.8	A	

(12h 34m)

I 9974

(12h 34m)



**FIELD CENTER:** 12<sup>h</sup>34<sup>m</sup>24.0<sup>s</sup> 26°15'59" (B1950)  
12<sup>h</sup>36<sup>m</sup>52.7<sup>s</sup> 25°59'29" (J2000)  
 $\ell$ : 231.36  $b$ : 86.55

**DATE:** 1981/ 16 - 1981/ 17  
**LIVETIME:** 20694.6s  
**ROLL ANGLE:** -101.4°

**NH:** 1.3E+20  
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2778	1	12 32 22.8	26 08 58	72	0.0038	0.0010	29.5	35.5	3.7	1.5	0	27.9	H	
2782	2	12 32 52.0	26 12 28	52	*0.00603	0.00098	61.0	37.0	6.2	1.2	805	20.9	H	
2784	3	12 33 00.2	26 29 00	56	0.00412	0.00095	38.5	40.5	4.3	1.4	500	23.0	H	
2790	4	12 33 37.6	26 29 57	52	0.00335	0.00083	37.5	48.5	4.0	0.8	0	17.4	H	
2793	5	12 33 52.5	26 15 47	38	0.0127	0.0011	181.0	60.0	11.7	2.1	0	7.1	H	
2795	6	12 34 29.7	26 07 27	42	0.00341	0.00074	48.5	63.5	4.6	0.9	0	8.5	H	
2796	7	12 34 32.0	26 25 34	41	0.00270	0.00074	37.0	65.0	3.7	0.6	0	9.9	H	
2797	8	12 34 32.5	26 32 25	51	*0.00436	0.00086	50.4	47.6	5.1	0.9	804	16.8	H	
2799	9	12 34 56.0	26 37 24	55	0.00510	0.00098	48.7	39.3	5.2	1.4	100	22.9	H	
2804	10	12 35 31.6	26 36 49	55	0.0046	0.0010	39.6	37.4	4.5	1.0	0	25.8	H	

Source Table cont.

# I 9974 cont.

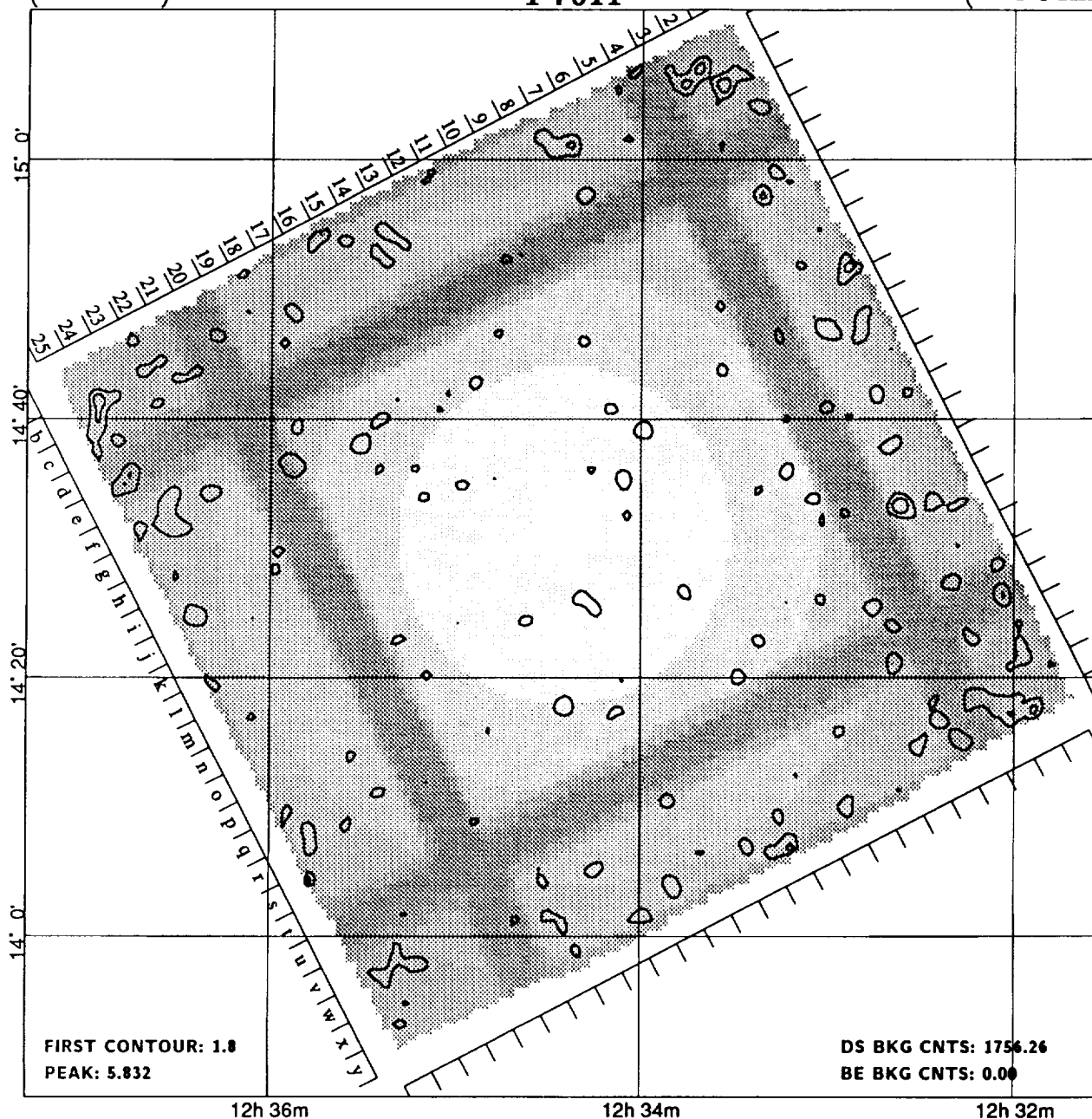
CAT	FLD	RA	DEC	±	COUNT	±	NET	BKG	S/N	SIZE	RECO	R'	SRC	ID
#	#	(1950)	(1950)	"	RATE		CTS	CTS		COR			FLG	
2805	11	12 35 31.7	26 07 17	55	0.00312	0.00078	36.4	46.6	4.0	1.4	0	17.3	H	



(12h 34m)

I 7011

(12h 34m)



## NGC 4571, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}34^{\text{m}}25.2^{\text{s}}$   $14^{\circ}29'35''$  (B1950)  
 $12^{\text{h}}36^{\text{m}}56.3^{\text{s}}$   $14^{\circ}13'05''$  (J2000)  
 $\ell$ : 287.53  $b$ : 76.65

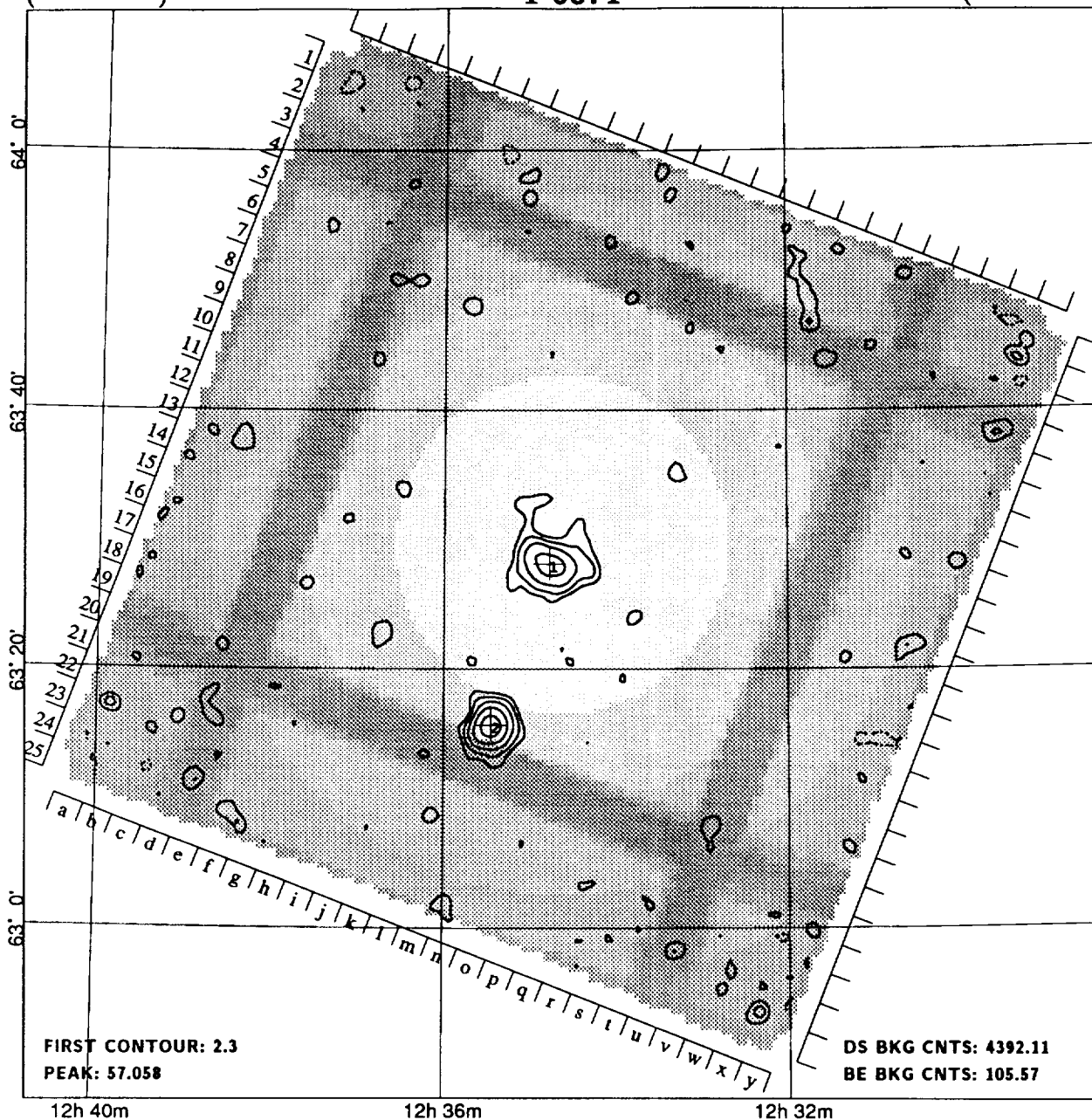
DATE: 1980/176 - 1980/176  
 LIVETIME: 1423.1s  
 ROLL ANGLE:  $62.6^{\circ}$

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(12h 34m)

I 6871

(12h 34m)



A1576, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $12^h 34^m 36.0^s$   $63^\circ 28' 59''$  (B1950)  
 $12^h 36^m 49.1^s$   $63^\circ 12' 29''$  (J2000)  
 $l: 125.72$   $b: 53.84$

DATE: 1980/111 - 1980/111  
 LIVETIME: 3559.1s  
 ROLL ANGLE:  $21.2^\circ$

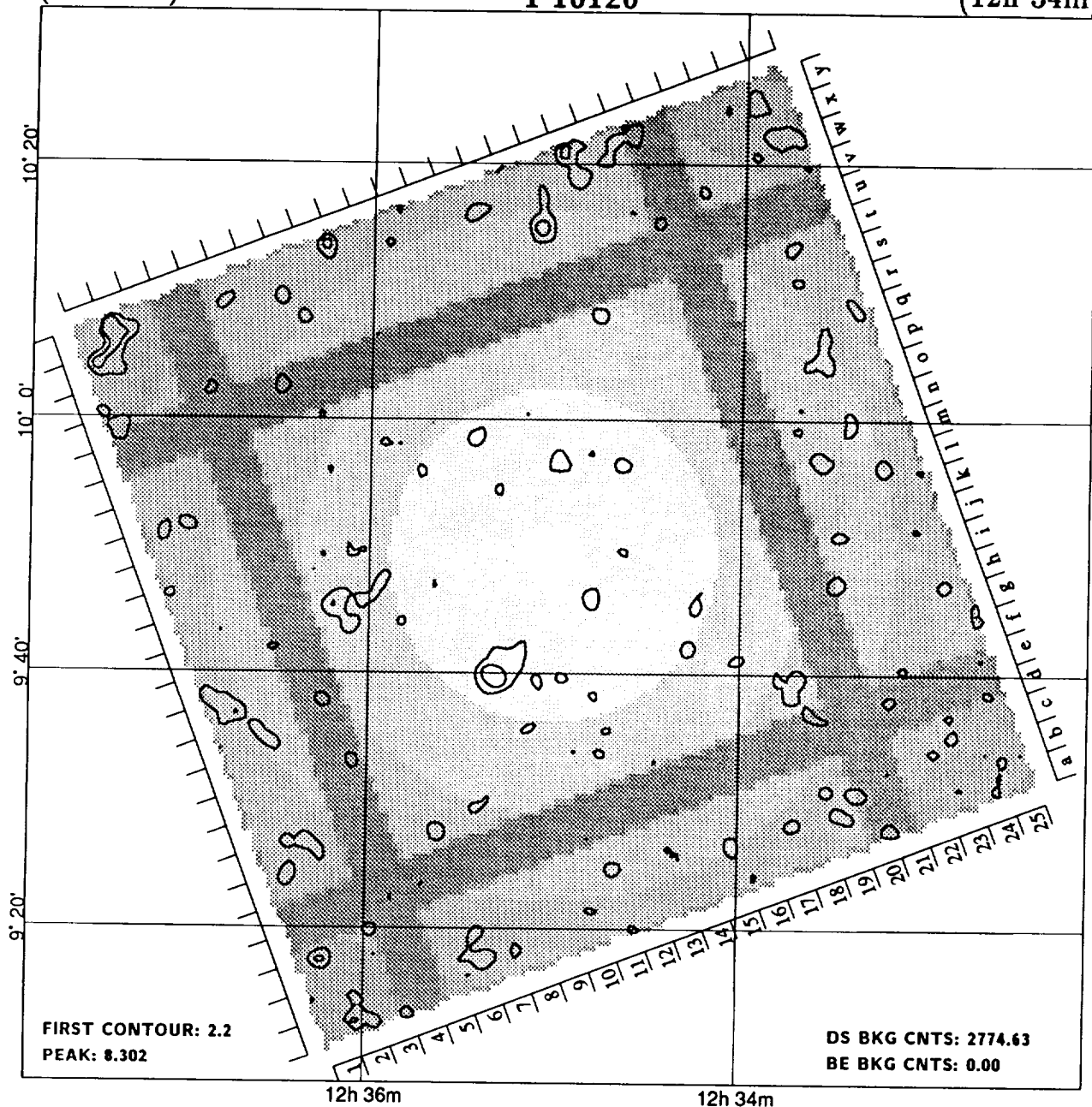
NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2798	1	12 34 46.5	63 28 10	31	0.0452	0.0044	118.9	12.1	10.4	1.8	0	1.3	H *	
2803	2	12 35 27.0	63 15 41	38	*0.0873	0.0066	183.6	8.4	13.2	1.2	602	14.6	H BL	

(12h 34m)

I 10120

(12h 34m)



NGC 4578, ACTIVE S0 GALAXIES

FIELD CENTER:  $12^{\text{h}}34^{\text{m}}59.0^{\text{s}}$   $09^{\circ}49'47''$  (B1950)  
 $12^{\text{h}}37^{\text{m}}30.9^{\text{s}}$   $09^{\circ}33'18''$  (J2000)  
 $l: 291.69$   $b: 72.12$

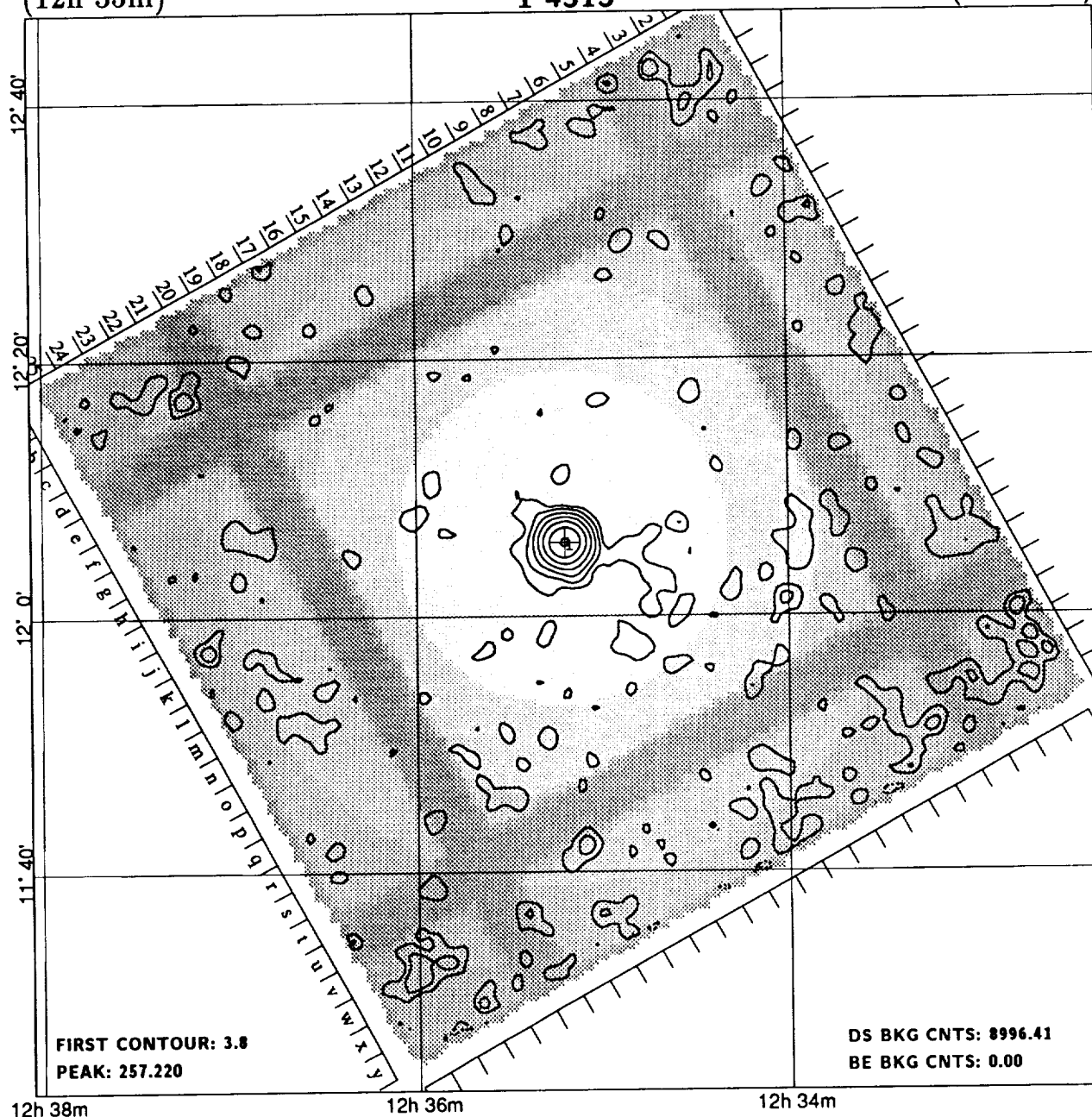
DATE: 1981/ 8 - 1981/ 8  
 LIVETIME: 2248.4s  
 ROLL ANGLE:  $-110.7^{\circ}$

NH:  $1.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(12h 35m)

I 4315

(12h 35m)



VIRGO CLUSTER FOLLOW-UP: NGC 4579

FIELD CENTER:  $12^{\text{h}}35^{\text{m}}12.0^{\text{s}}$   $12^{\circ}04'59''$  (B1950)  
 $12^{\text{h}}37^{\text{m}}43.5^{\text{s}}$   $11^{\circ}48'30''$  (J2000)  
 $l: 290.40$   $b: 74.35$

DATE: 1979/191 - 1979/192  
 LIVETIME: 7290.0s  
 ROLL ANGLE:  $61.2^{\circ}$

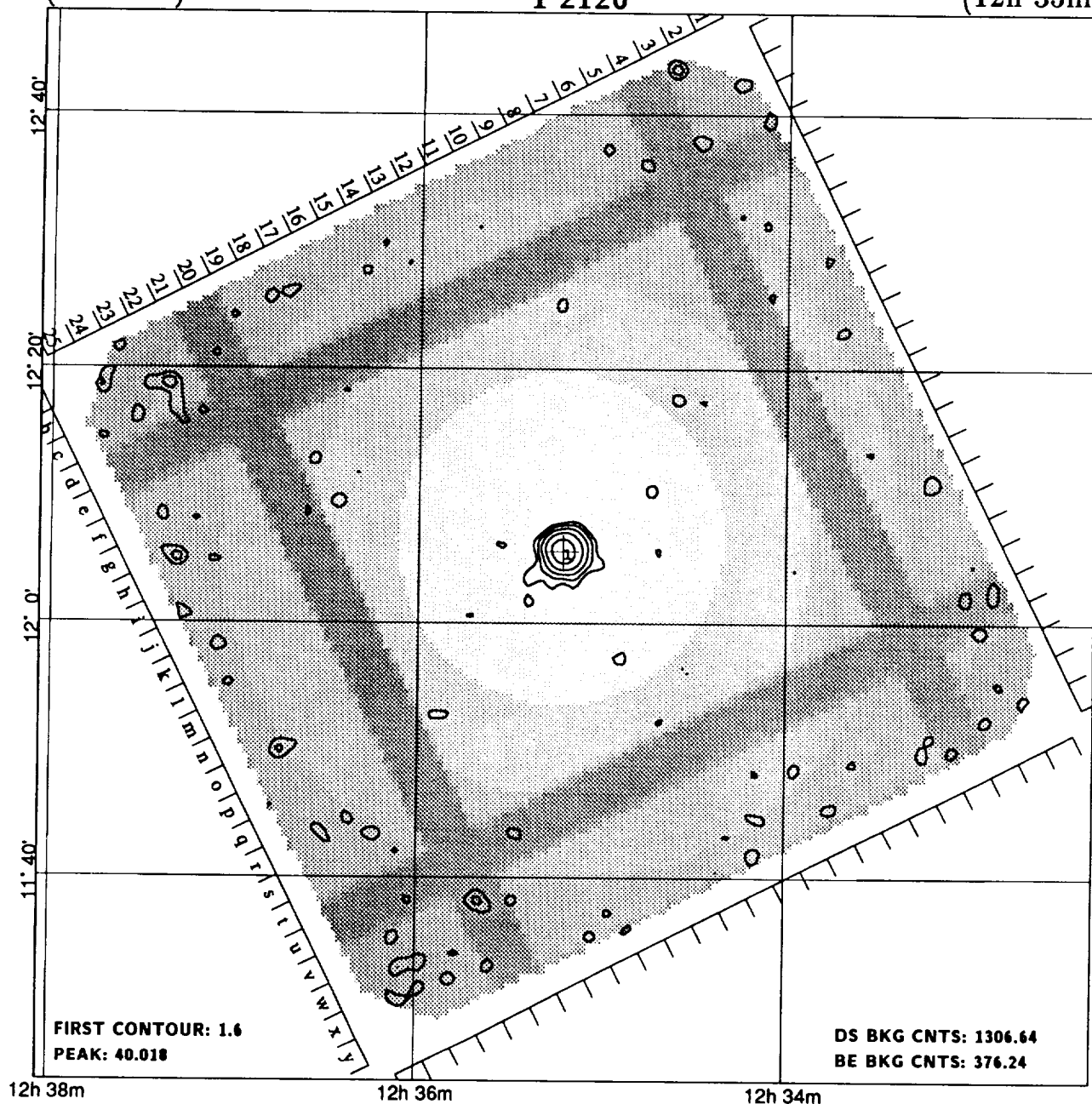
NH:  $2.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2801	1L	12 35 12.1	12 05 41	31	0.1885	0.0072	1025.6	147.4	26.2	1.4	0	0.7	A	G

(12h 35m)

I 2126

(12h 35m)



## X-RAY SURVEY OF NORMAL GALAXIES: NGC4579=M58

FIELD CENTER:  $12^{\text{h}}35^{\text{m}}12.0^{\text{s}}$   $12^{\circ}05'59''$  (B1950)  
 $12^{\text{h}}37^{\text{m}}43.5^{\text{s}}$   $11^{\circ}49'30''$  (J2000)  
 $\ell$ : 290.39  $b$ : 74.36

DATE: 1979/178 - 1979/178  
 LIVETIME: 1058.8s  
 ROLL ANGLE:  $63.3^{\circ}$

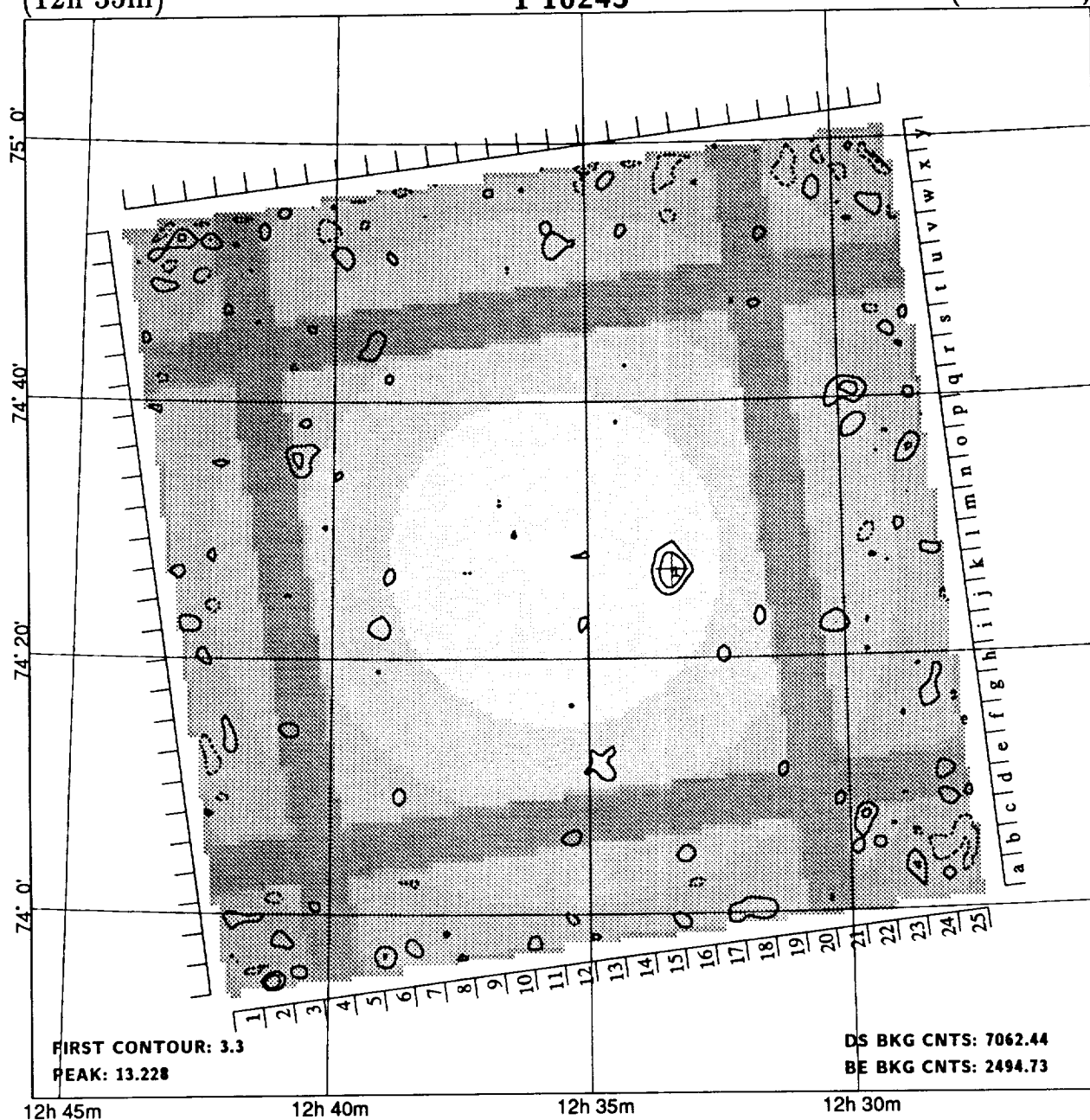
NH:  $2.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2801	1L	12 35 12.8	12 05 40	31	0.228	0.020	179.5	12.5	11.4	1.2	0	0.3	A	G

(12h 35m)

I 10243

(12h 35m)



N 4589: E &amp; SO GALAXIES W/ COMPACT NUCLEAR RADIO CORES

FIELD CENTER:  $12^h 35^m 29.5^s$   $74^\circ 28' 09''$  (B1950) $12^h 37^m 25.5^s$   $74^\circ 11' 40''$  (J2000) $l$ : 124.23  $b$ : 42.90

DATE: 1980/364 - 1980/364

LIVETIME: 5722.9s

ROLL ANGLE:  $-97.2^\circ$ NH:  $2.1E+20$ 

REF/ID: !

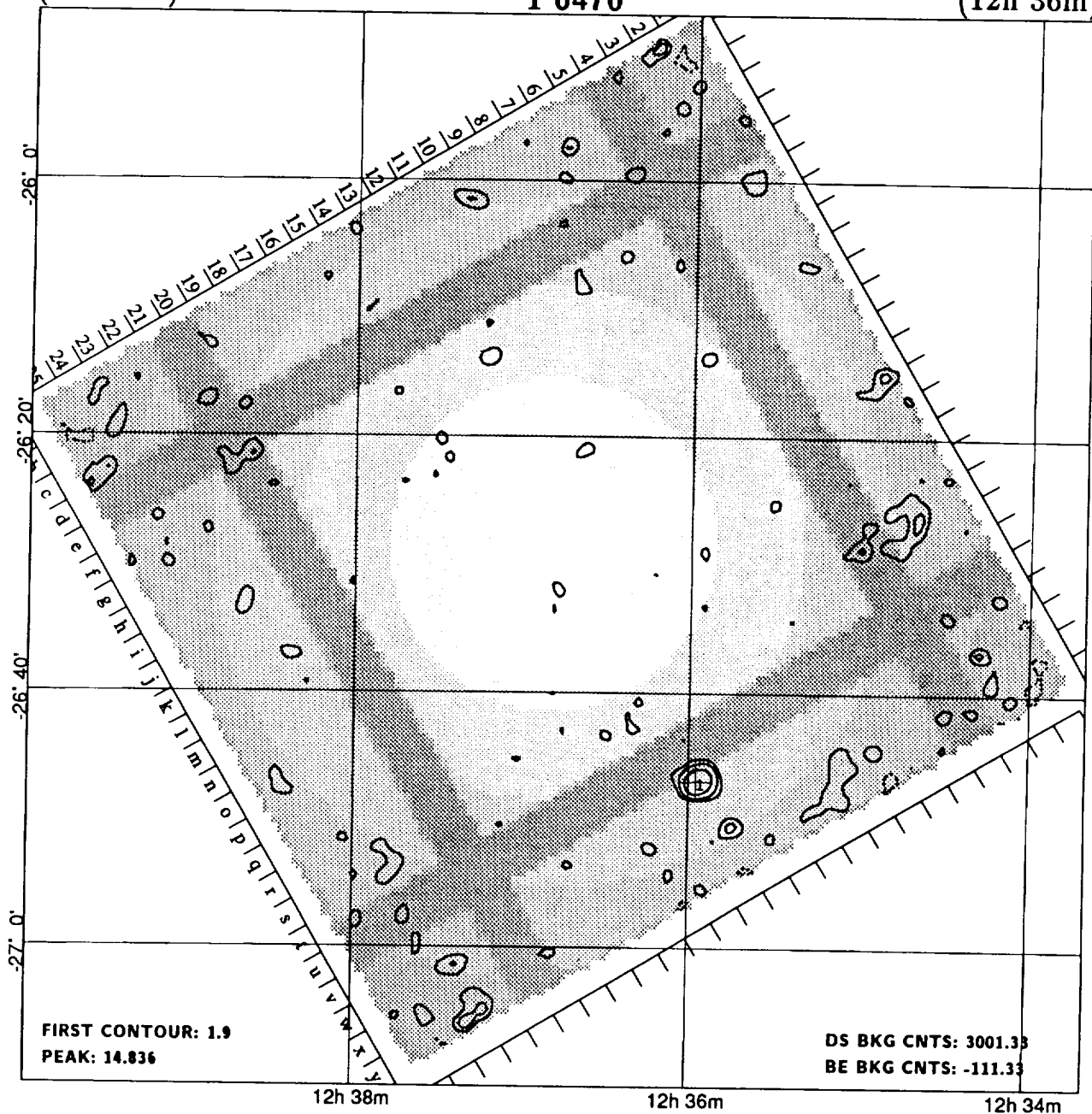
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2787	1	12 33 21.2	74 26 55	41	0.0123	0.0022	47.6	23.4	5.6	1.0	0	8.7	H	

(12h 36m)

I 6470

(12h 36m)



## NGC 4590, GLOBULAR CLUSTER SURVEY

FIELD CENTER:  $12^{\text{h}}36^{\text{m}}48.0^{\text{s}}$   $-26^{\circ}28'59''$  (B1950)  
 $12^{\text{h}}39^{\text{m}}27.3^{\text{s}}$   $-26^{\circ}45'28''$  (J2000)  
 $l: 299.62$   $b: 36.04$

DATE: 1980/210 - 1980/210  
 LIVETIME: 2432.1s  
 ROLL ANGLE:  $59.4^{\circ}$

NH:  $7.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

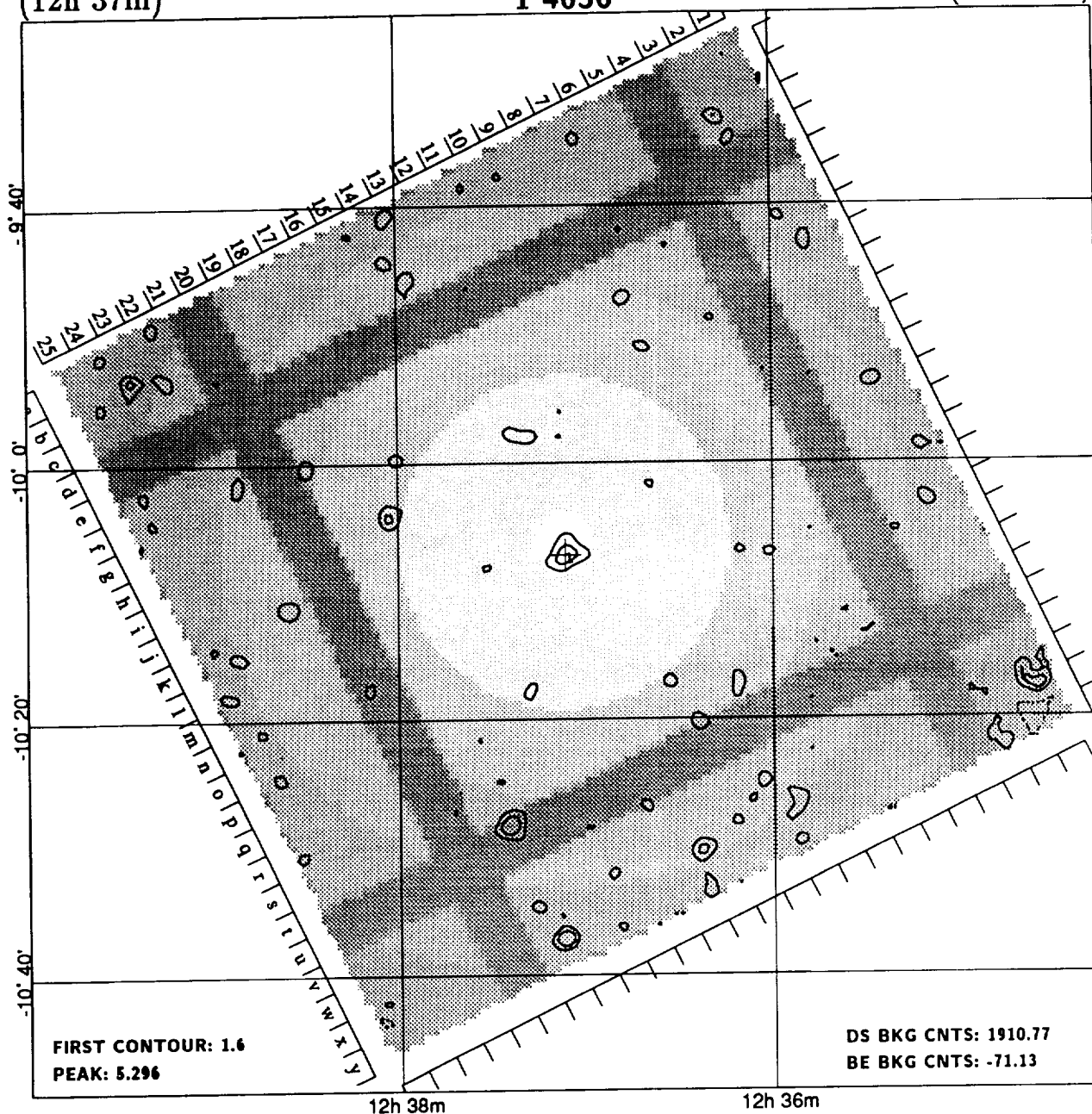
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2807	1	12 35 57.4	-26 47 00	50	*0.0325	0.0056	37.9	4.1	5.8	1.0	703	21.3	H



(12h 37m)

I 4036

(12h 37m)



## QUASAR 1237-101 (ON-162)

FIELD CENTER:  $12^h 37^m 07.2^s$   $-10^\circ 07' 00''$  (B1950)  
 $12^h 39^m 43.0^s$   $-10^\circ 23' 29''$  (J2000)  
 $l: 298.21$   $b: 52.37$

DATE: 1979/178 - 1979/178  
 LIVETIME: 1548.4s  
 ROLL ANGLE:  $64.1^\circ$

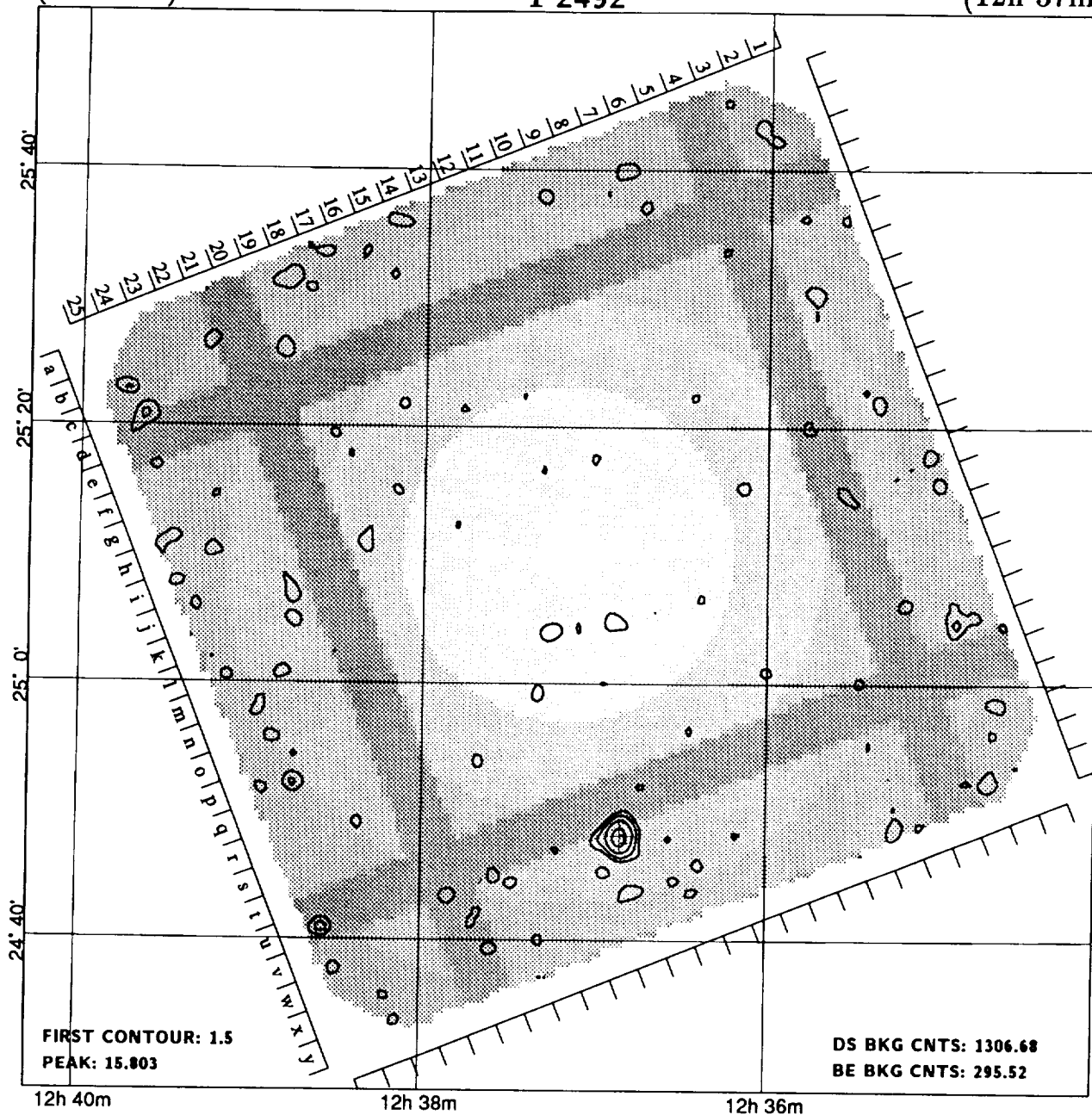
NH:  $3.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2813	1	12 37 06.5	-10 07 08	37	0.0160	0.0042	18.5	4.5	3.9	0.8	0	0.4	H	Q

(12h 37m)

I 2492

(12h 37m)



## 1237+25K: SURVEY OF NEARBY RADIO PULSARS

FIELD CENTER:  $12^{\text{h}} 37^{\text{m}} 12.0^{\text{s}}$   $25^{\circ} 10' 16''$  (B1950)  
 $12^{\text{h}} 39^{\text{m}} 40.5^{\text{s}}$   $24^{\circ} 53' 48''$  (J2000)  
 $l: 252.45$   $b: 86.54$

DATE: 1979/181 - 1979/181  
 LIVETIME: 1058.8s  
 ROLL ANGLE:  $68.4^{\circ}$

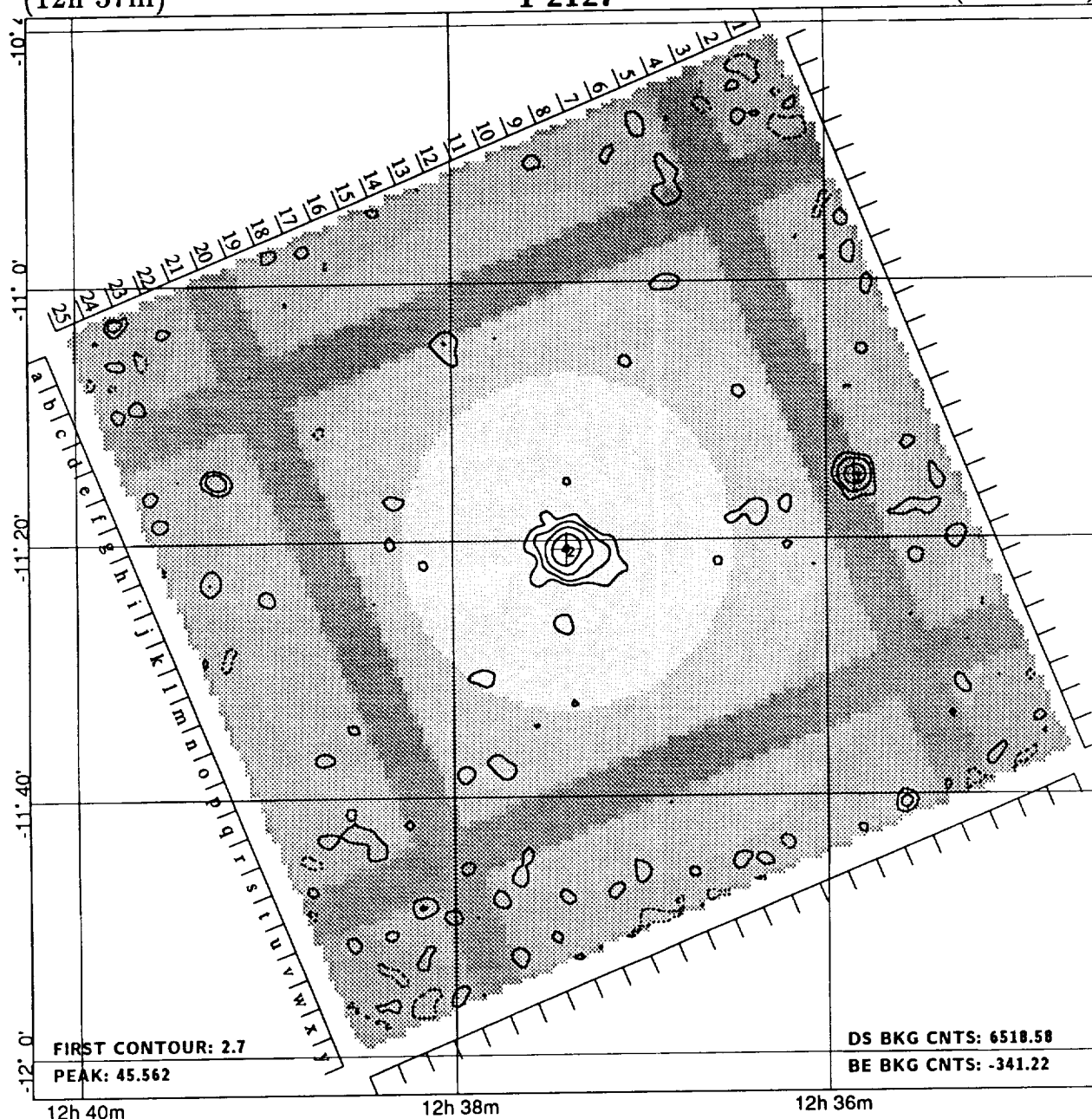
NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2810	1	12 36 50.6	24 48 12	50	*0.072	0.012	36.1	1.9	5.9	1.0	804	22.2	H	

(12h 37m)

I 2127

(12h 37m)



## NGC4594=M104,SOMBRERO: X-RAY SURVEY OF NORMAL GALAXIES

FIELD CENTER:  $12^h 37^m 24.0^s$   $-11^\circ 20' 59''$  (B1950)  
 $12^h 40^m 00.0^s$   $-11^\circ 37' 27''$  (J2000)  
 $l: 298.46$   $b: 51.15$

DATE: 1979/178 - 1979/178  
 LIVETIME: 5282.2s  
 ROLL ANGLE:  $67.6^\circ$

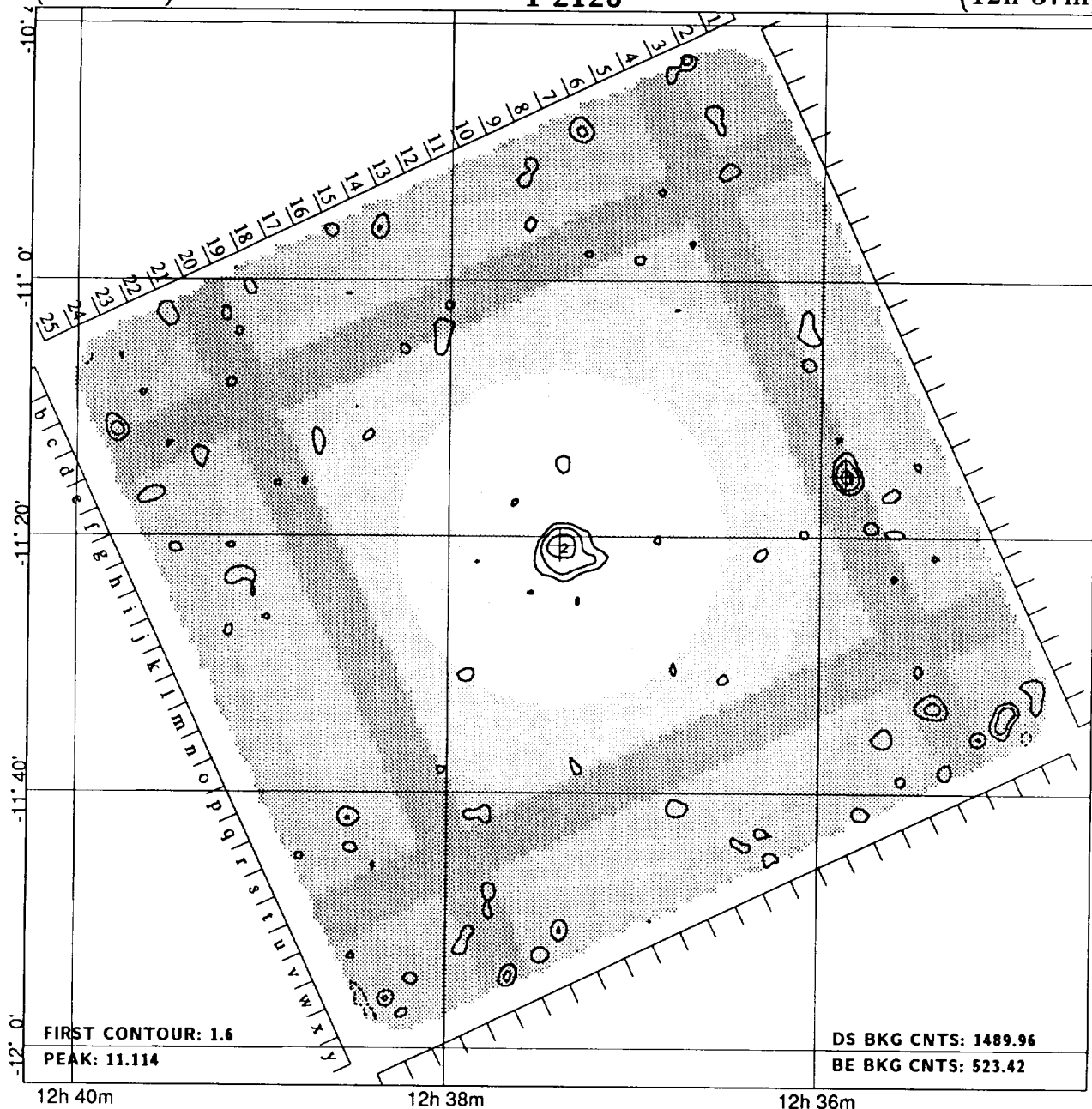
NH:  $3.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2806	1	12 35 51.1	-11 15 04	51	*0.0170	0.0029	41.5	8.5	5.9	1.0	1108	23.3	A	S
2814	2	12 37 23.5	-11 20 40	31	0.0484	0.0036	190.3	14.7	13.3	1.6	0	0.4	AH	G

(12h 37m)

I 2128

(12h 37m)



## NGC4594=M104,SOMBRERO: X-RAY SURVEY OF NORMAL GALAXIES

FIELD CENTER:  $12^{\text{h}}37^{\text{m}}24.0^{\text{s}}$   $-11^{\circ}20'59''$  (B1950)  
 $12^{\text{h}}40^{\text{m}}00.0^{\text{s}}$   $-11^{\circ}37'27''$  (J2000)  
 $l: 298.46$   $b: 51.15$

DATE: 1980/202 - 1980/202  
 LIVETIME: 1207.4s  
 ROLL ANGLE:  $64.8^{\circ}$

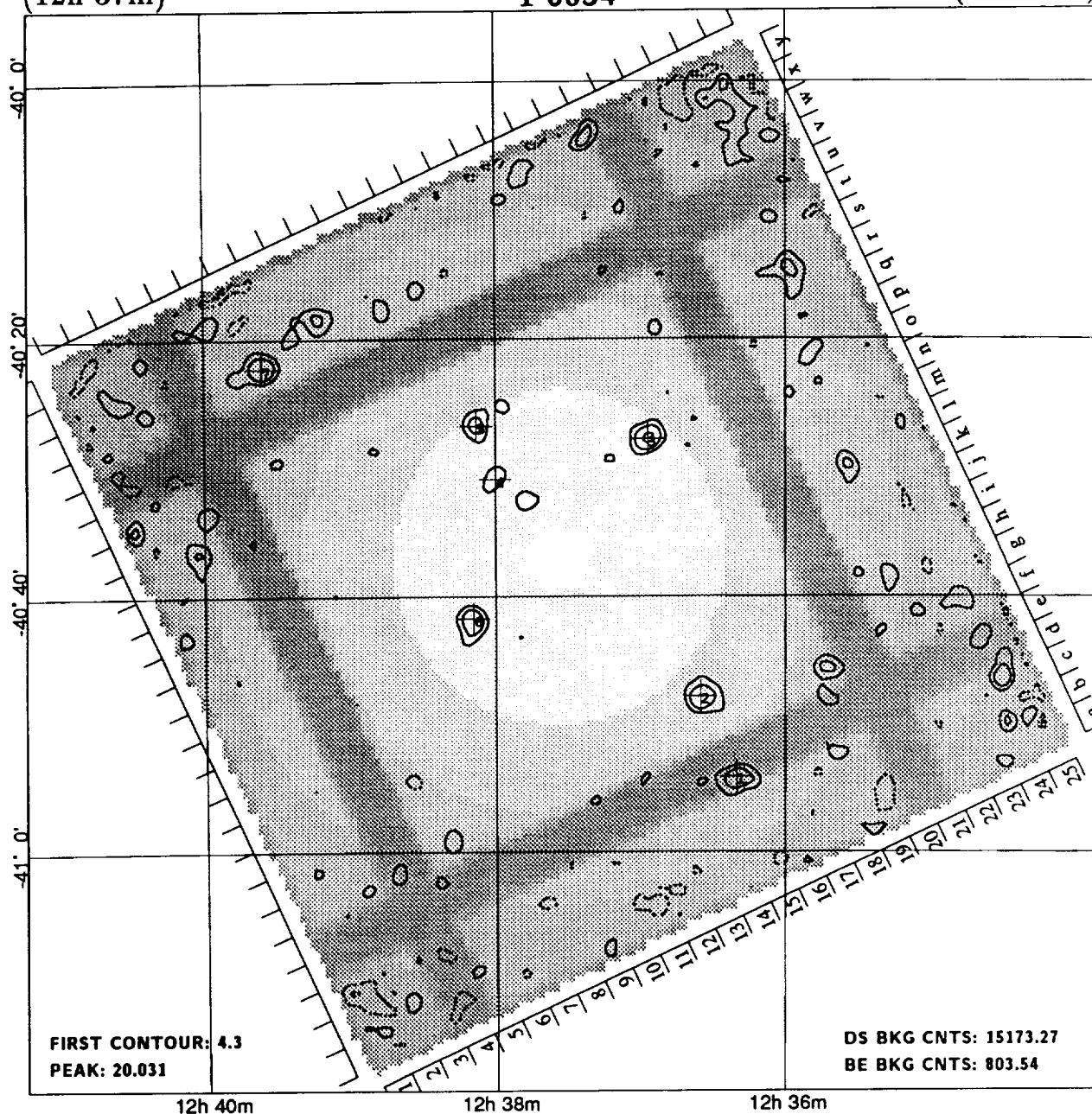
NH:  $3.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2806	1	12 35 52.2	-11 15 09	54	*0.0259	0.0074	14.5	2.5	3.5	0.8	1309	23.2	A	S
2814	2	12 37 24.0	-11 20 42	35	0.0521	0.0080	46.9	5.1	6.5	1.4	0	0.2	AH	G

(12h 37m)

I 6054

(12h 37m)



## CENTAURUS, DETAILED STUDY OF CLUSTER EXTENTS

FIELD CENTER:  $12^h 37^m 32.0^s$   $-40^\circ 36' 33''$  (B1950)  
 $12^h 40^m 15.5^s$   $-40^\circ 53' 01''$  (J2000)  
 $l: 300.65$   $b: 21.94$

DATE: 1980/ 11 - 1980/ 12  
 LIVETIME: 12295.4s  
 ROLL ANGLE:  $-114.9^\circ$

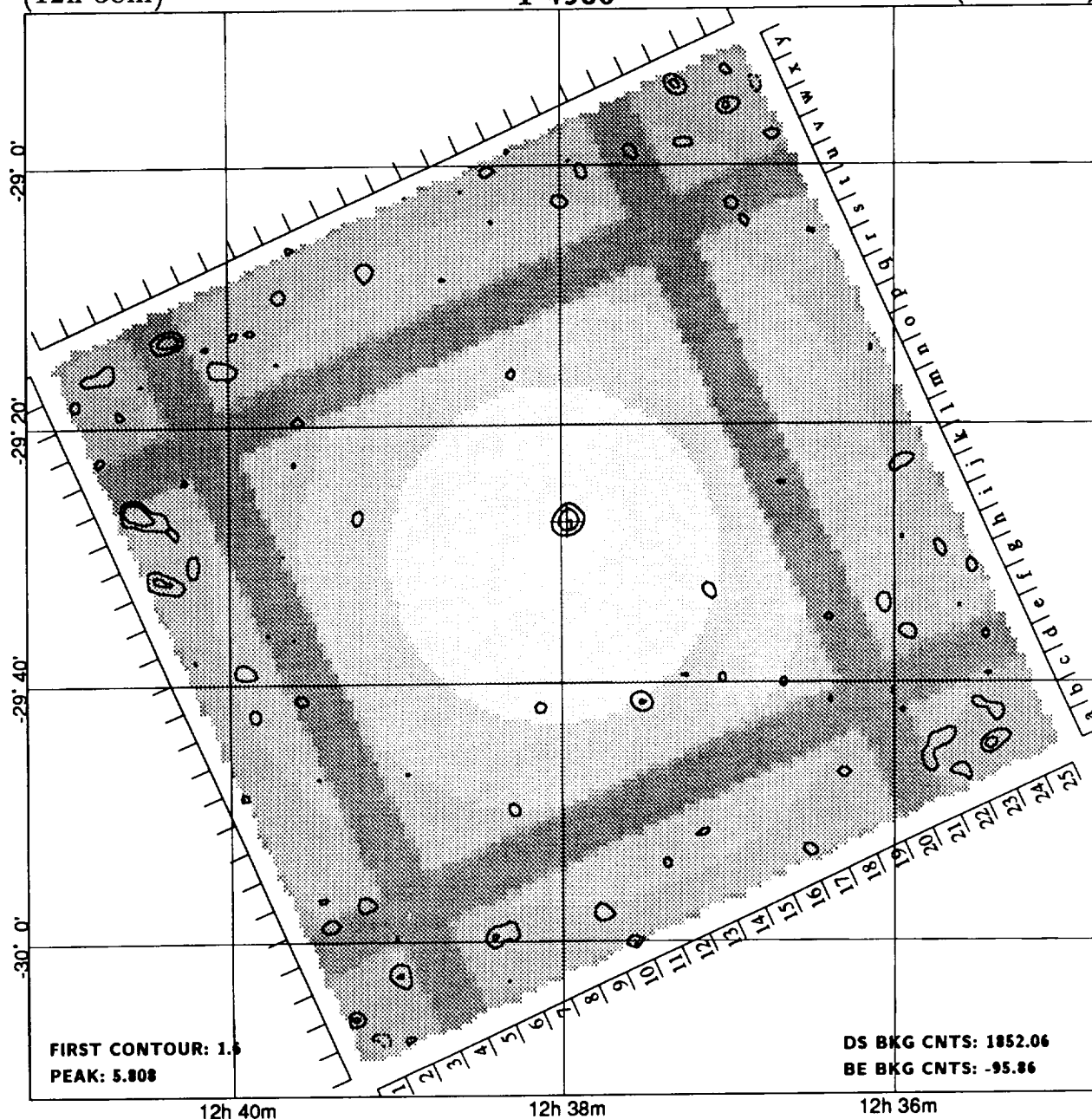
NH:  $7.7E+20$   
 REF/ID: CLG  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2808	1	12 36 20.2	-40 54 10	55	*0.0062	0.0013	36.5	18.5	4.9	0.8	1309	22.1	H
2809	2	12 36 35.1	-40 47 51	51	0.0062	0.0012	44.6	33.4	5.0	0.8	0	15.3	H
2811	3	12 36 56.8	-40 27 49	41	0.0073	0.0012	57.9	31.1	6.1	0.8	0	10.9	H
2816	4	12 38 00.0	-40 30 58	47	0.00349	0.00098	29.5	39.5	3.6	0.5	0	7.9	H
2817	5	12 38 07.9	-40 26 48	42	0.0045	0.0010	35.3	30.7	4.3	0.6	0	11.9	H
2818	6	12 38 09.4	-40 41 46	41	0.0057	0.0011	47.7	39.3	5.1	0.8	0	8.8	H
2827	7	12 39 36.4	-40 22 15	55	0.0066	0.0015	31.5	21.5	4.3	0.9	200	27.6	AH

(12h 38m)

I 4980

(12h 38m)



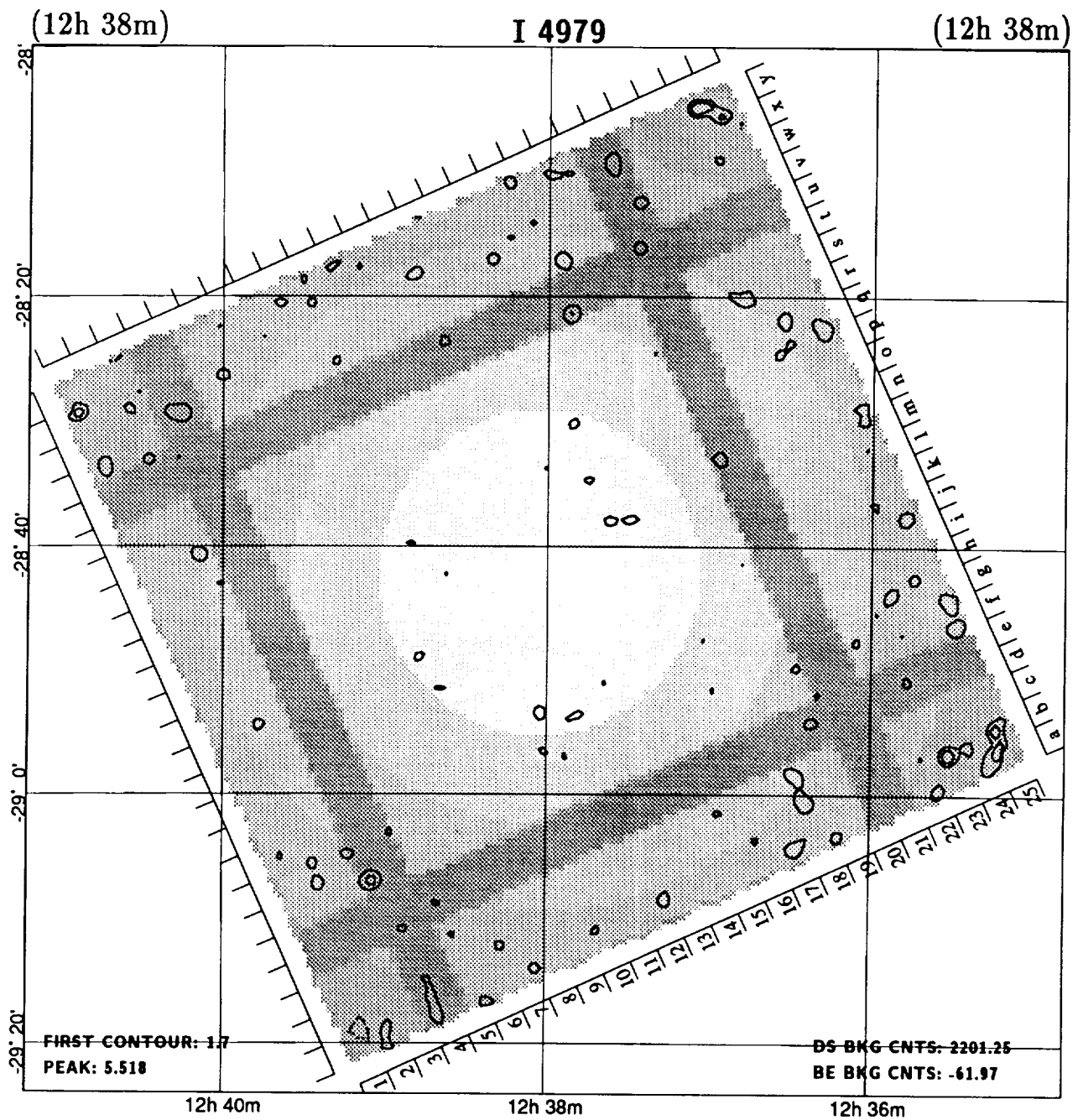
## SOFT SOURCE AT 1238-29 #2

FIELD CENTER:  $12^{\text{h}}38^{\text{m}}00.0^{\text{s}}$   $-29^{\circ}29'59''$  (B1950)  
 $12^{\text{h}}40^{\text{m}}40.2^{\text{s}}$   $-29^{\circ}46'27''$  (J2000)  
 $l$ : 300.14  $b$ : 33.04

DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 1500.8s  
 ROLL ANGLE:  $-114.4^{\circ}$

NH:  $5.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2815	1	12 37 57.9	-29 27 35	37	0.0172	0.0044	19.0	4.0	4.0	0.7	0	2.6	



SOFT SOURCE AT 1238-29 #1

FIELD CENTER:  $12^h 38^m 00.0^s$   $-28^\circ 41' 59''$  (B1950)  
 $12^h 40^m 40.0^s$   $-28^\circ 58' 27''$  (J2000)  
 $l: 300.10$   $b: 33.84$

DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 1783.7s  
 ROLL ANGLE:  $-114.4^\circ$

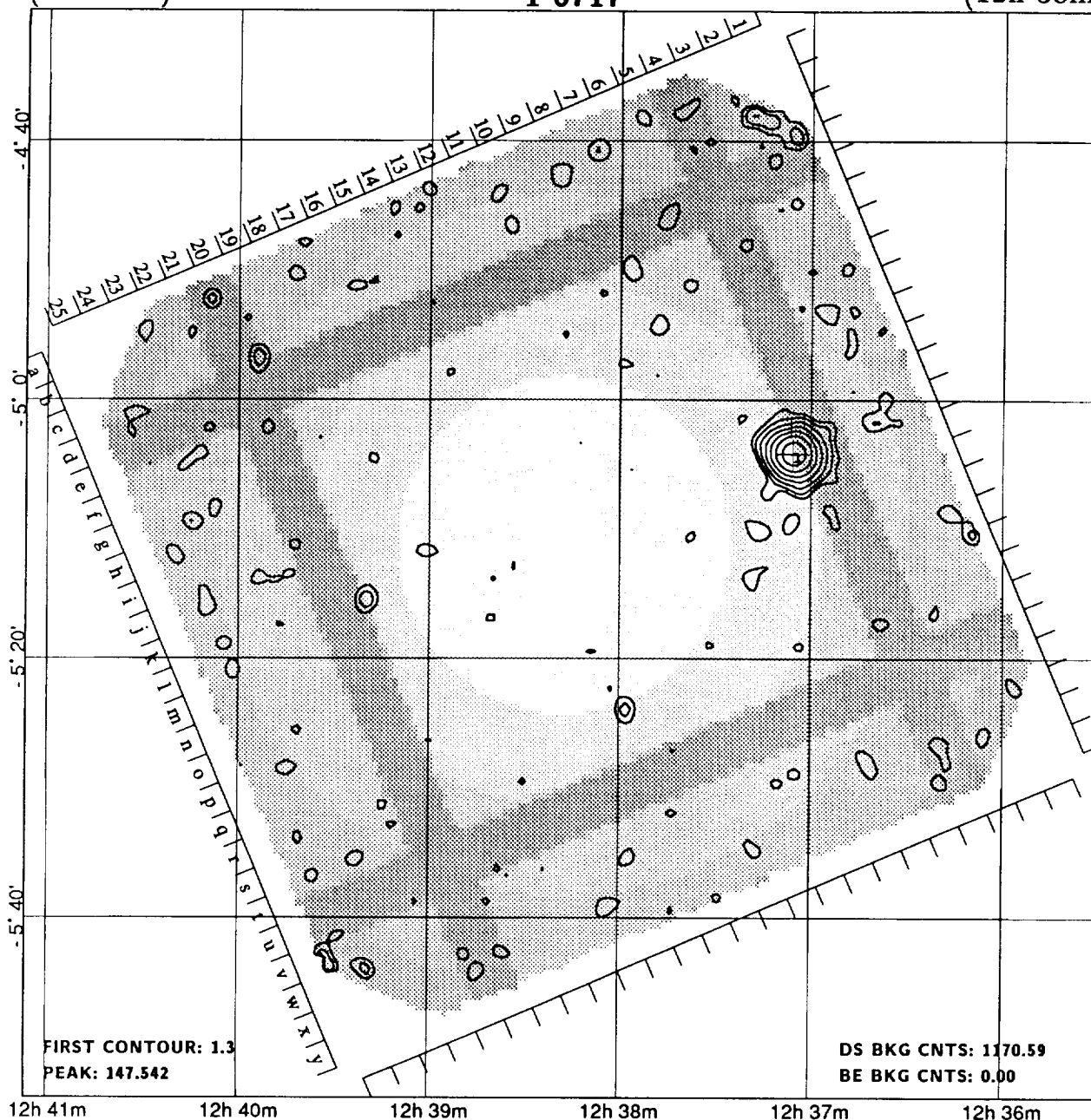
NH:  $6.0E+20$   
 REF/ID:  
 FIELD FLAGS:



(12h 38m)

I 6717

(12h 38m)



SEYFERT SURVEY: NGC 4593 (4U1240-05)

FIELD CENTER:  $12^{\text{h}}38^{\text{m}}18.0^{\text{s}}$   $-05^{\circ}11'59''$  (B1950)  
 $12^{\text{h}}40^{\text{m}}52.8^{\text{s}}$   $-05^{\circ}28'27''$  (J2000)  
 $l: 298.06$   $b: 57.30$

DATE: 1980/171 - 1980/171  
 LIVETIME: 948.6s  
 ROLL ANGLE:  $67.0^{\circ}$

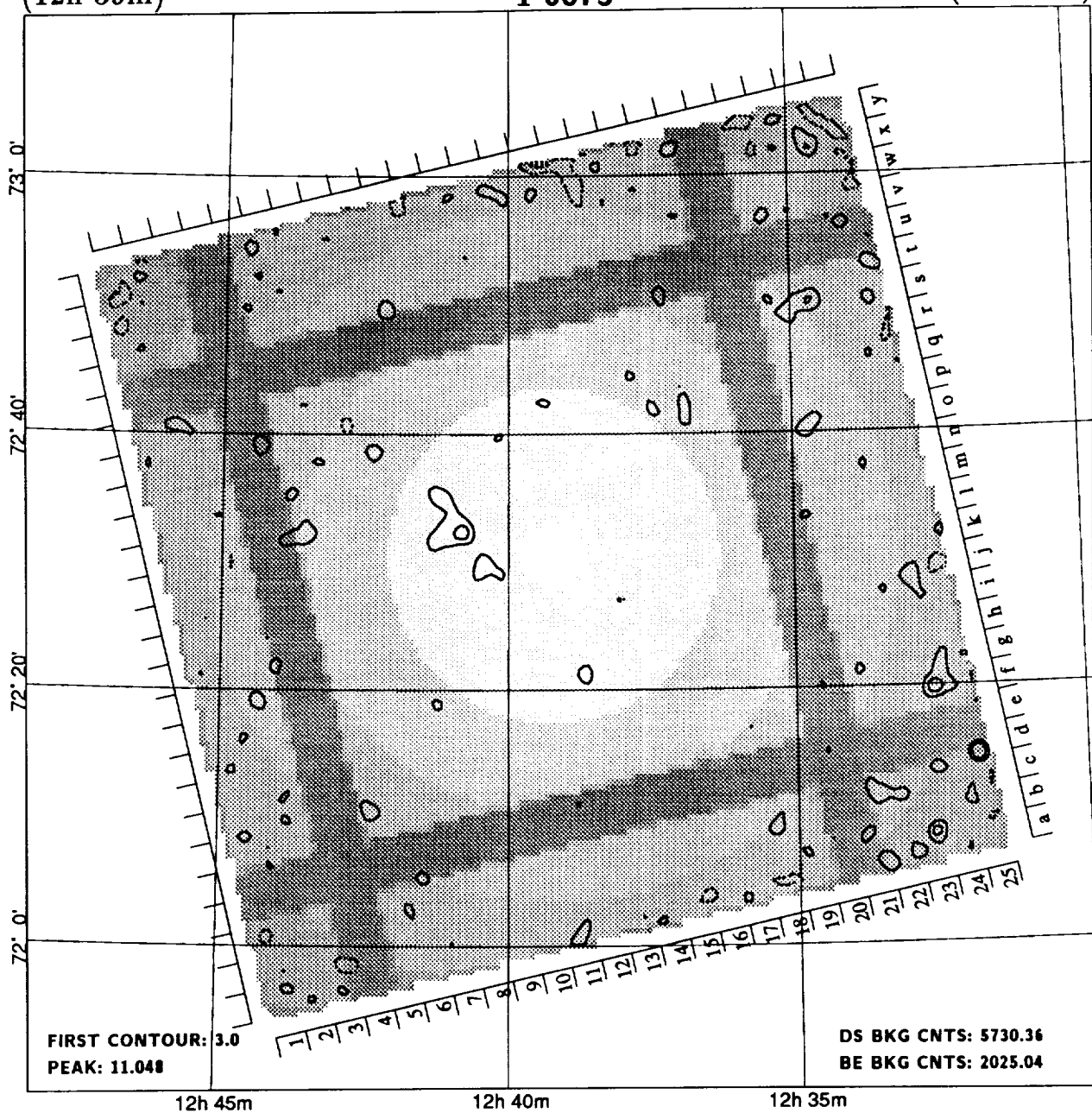
NH:  $2.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2812	1L	12 37 05.6	-05 04 10	47	*0.646	0.063	321.2	32.1	10.1	1.2	805	19.7		

(12h 39m)

I 6873

(12h 39m)



A1597, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $12^{\text{h}}39^{\text{m}}06.0^{\text{s}}$   $72^{\circ}30'59''$  (B1950)  
 $12^{\text{h}}41^{\text{m}}03.1^{\text{s}}$   $72^{\circ}14'32''$  (J2000)  
 $l: 124.05$   $b: 44.86$

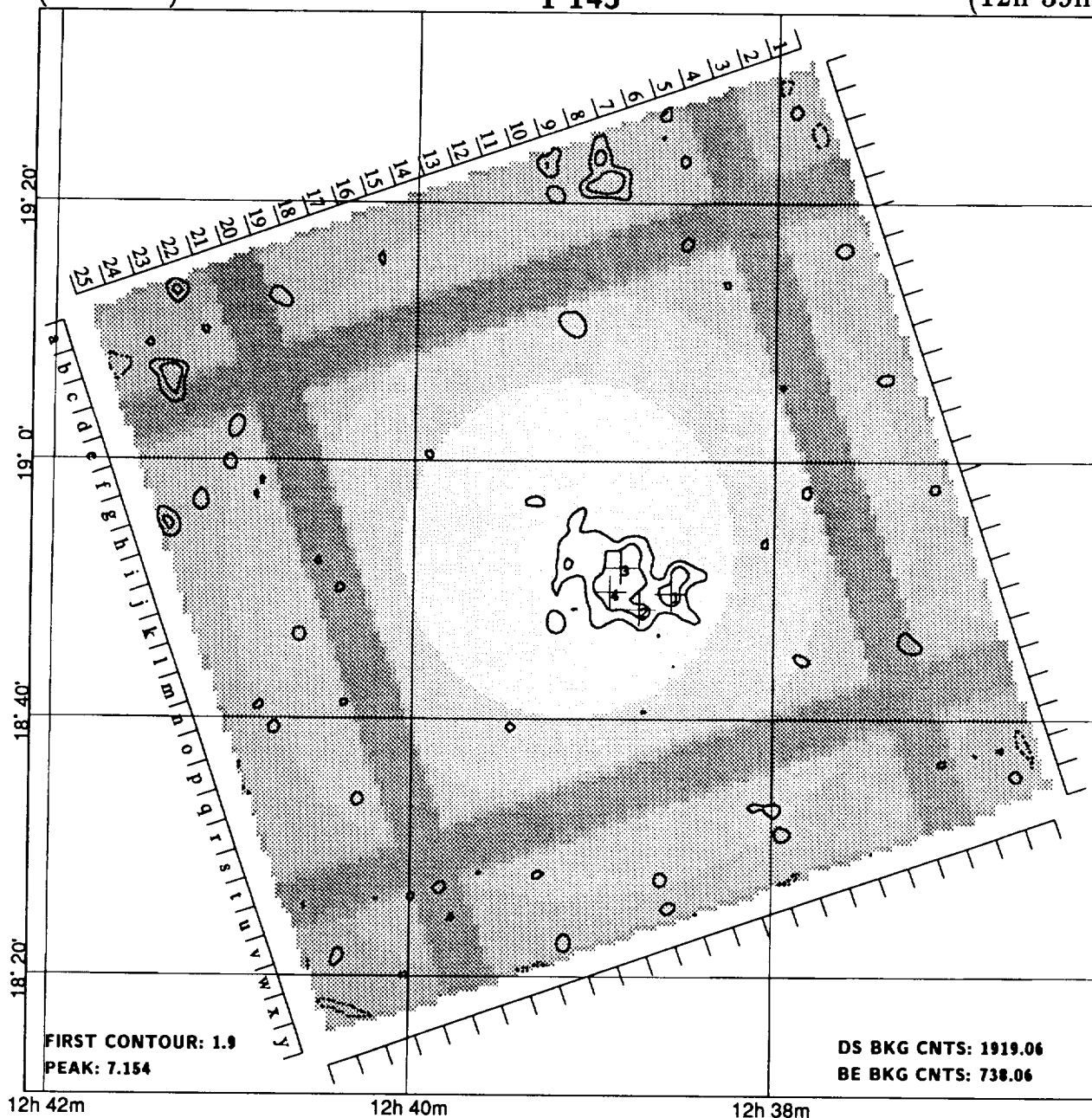
DATE: 1980/360 - 1980/360  
 LIVETIME: 4643.5s  
 ROLL ANGLE:  $-102.9^{\circ}$

NH:  $1.6\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS: L

(12h 39m)

I 145

(12h 39m)



## A1589 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $12^h 39^m 09.6^s$   $18^\circ 52' 47''$  (B1950)  
 $12^h 41^m 39.4^s$   $18^\circ 36' 21''$  (J2000)  
 $l: 287.63$   $b: 81.19$

DATE: 1979/101 - 1979/101  
 LIVETIME: 1555.1s  
 ROLL ANGLE:  $71.0^\circ$

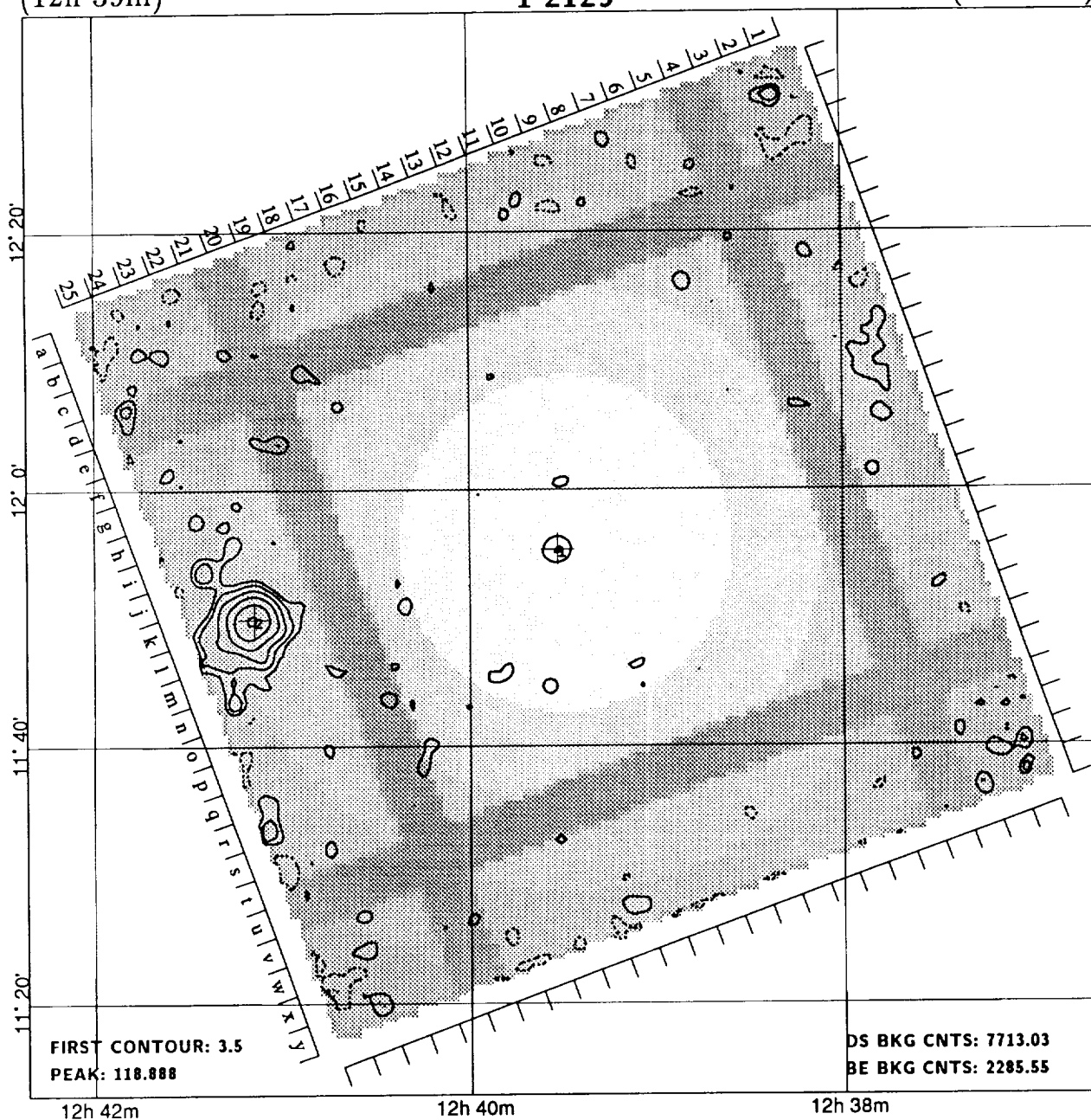
NH:  $1.9E+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2819	1	12 38 34.1	18 49 45	43	0.0189	0.0048	20.0	6.0	3.9	7.1	0	8.7	H	
2820	2	12 38 44.6	18 48 34	43	0.0175	0.0047	18.9	7.1	3.7	7.5	0	7.1		
2821	3	12 38 50.9	18 51 46	36	0.0304	0.0057	34.0	7.0	5.3	5.2	0	4.7	H	
2822	4	12 38 54.4	18 49 54	37	0.0242	0.0052	27.0	7.0	4.6	5.7	0	4.2		

(12h 39m)

I 2129

(12h 39m)



## X-RAY SURVEY OF NORMAL GALAXIES: NGC4621=M59

FIELD CENTER:  $12^h 39^m 30.0^s$   $11^\circ 54' 59''$  (B1950)  
 $12^h 42^m 01.3^s$   $11^\circ 38' 33''$  (J2000)  
 $l$ : 294.35  $b$ : 74.36

DATE: 1980/193 - 1980/193  
 LIVETIME: 6250.1s  
 ROLL ANGLE:  $70.0^\circ$

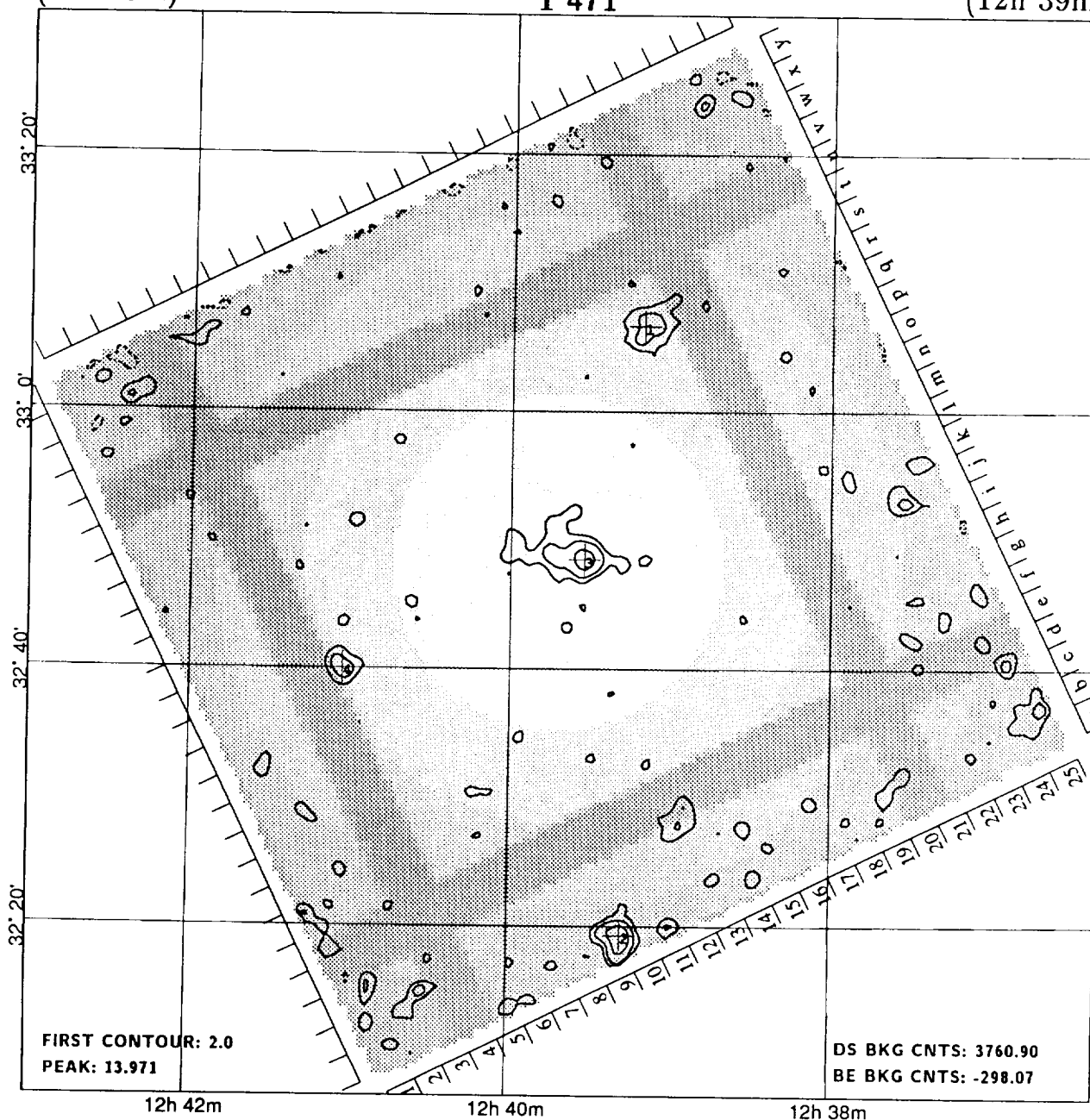
NH:  $2.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2825	1	12 39 31.6	11 55 23	36	0.0060	0.0016	28.0	27.0	3.8	0.6	0	0.8	G	
2835	2	12 41 09.2	11 49 56	47	0.1145	0.0067	304.7	17.3	17.0	1.9	0	24.9	AH	G

(12h 39m)

I 471

(12h 39m)



## NGC 4631 ABNORMAL GALAXIES SURVEY

FIELD CENTER:  $12^h 39^m 40.8^s$   $32^\circ 48' 47''$  (B1950)  
 $12^h 42^m 06.9^s$   $32^\circ 32' 21''$  (J2000)  
 $\ell$ : 142.85  $b$ : 84.22

DATE: 1978/354 - 1978/354  
 LIVETIME: 3047.6s  
 ROLL ANGLE:  $-116.1^\circ$

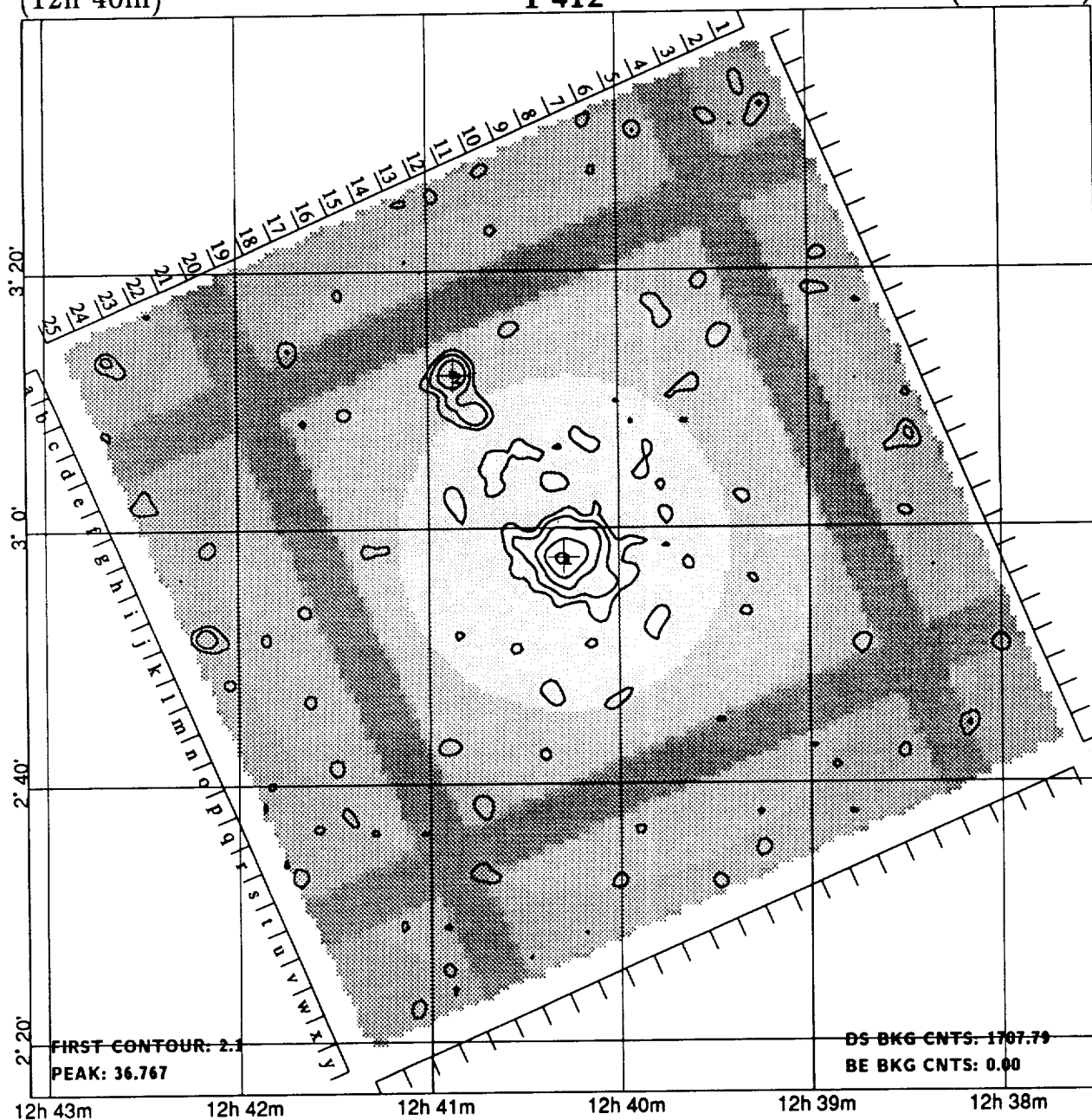
NH:  $1.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2823	1	12 39 10.6	33 06 40	55	0.0117	0.0032	18.5	6.5	3.7	1.4	0	19.0	H	
2824	2	12 39 17.6	32 19 18	51	0.0217	0.0049	23.9	5.1	4.4	1.1	200	29.8	H	
2826	3	12 39 32.3	32 48 30	35	0.0232	0.0035	52.1	8.9	6.7	1.9	0	1.5	H	G
2834	4	12 41 02.7	32 39 59	55	*0.0113	0.0030	18.3	4.7	3.8	0.8	702	19.3	H	

(12h 40m)

I 412

(12h 40m)



## NGC 4636 ABNORMAL GALAXIES SURVEY

FIELD CENTER:  $12^{\text{h}}40^{\text{m}}18.0^{\text{s}}$   $02^{\circ}57'59''$  (B1950)  
 $12^{\text{h}}42^{\text{m}}51.1^{\text{s}}$   $02^{\circ}41'34''$  (J2000)  
 $l$ : 297.76  $b$ : 65.48

DATE: 1979/179 - 1979/179  
 LIVETIME: 1383.9s  
 ROLL ANGLE: 66.5°

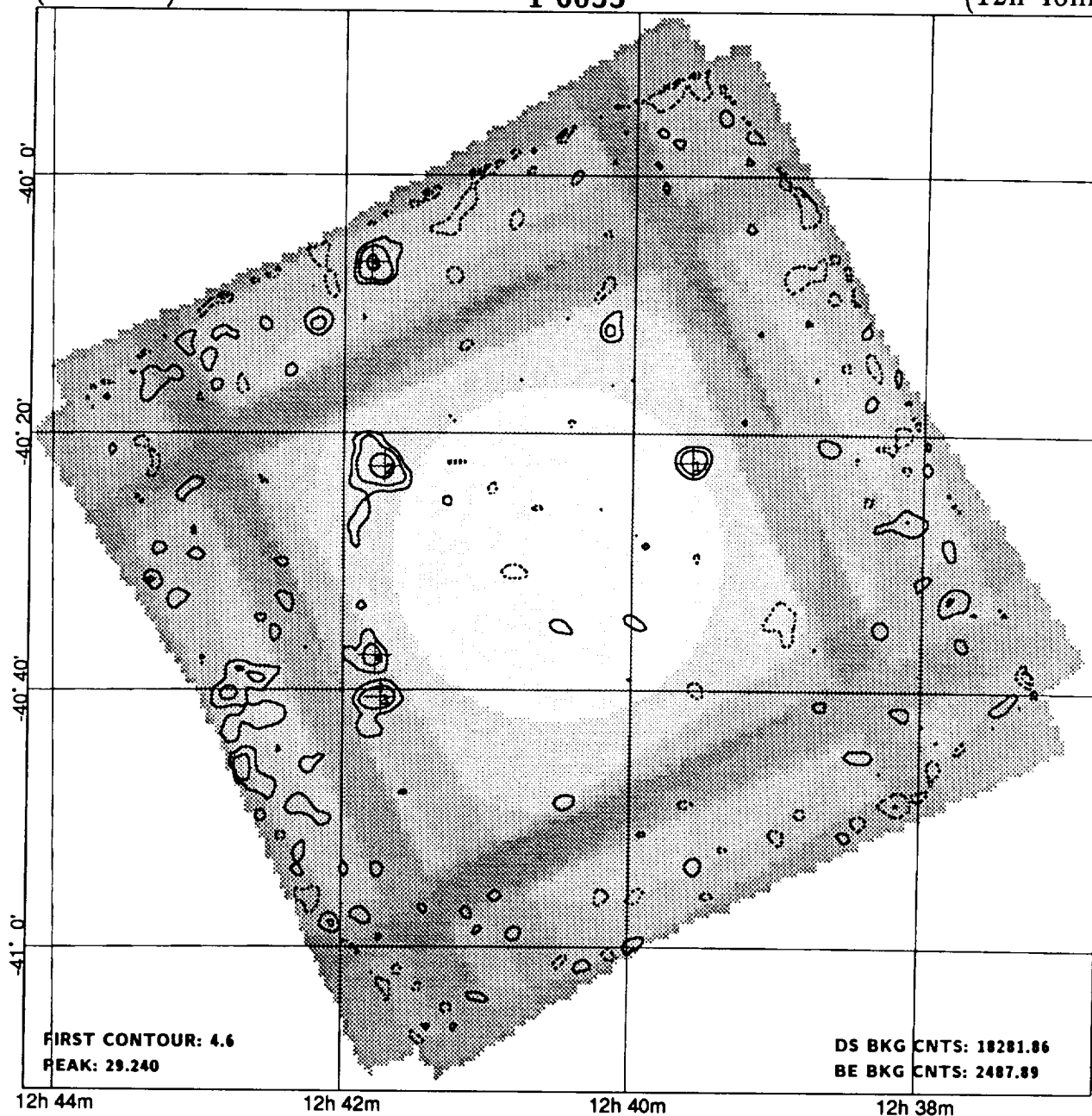
NH:  $1.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2829	1L	12 40 17.4	02 57 44	31	0.101	0.015	103.9	63.1	6.6	2.4	0	0.3		G
2833	2L	12 40 51.9	03 11 54	50	0.059	0.011	47.1	8.9	5.3	1.5	0	16.2		S

(12h 40m)

I 6055

(12h 40m)



## CENTAURUS, DETAILED STUDY OF CLUSTER EXTENTS

FIELD CENTER:  $12^{\text{h}}40^{\text{m}}29.0^{\text{s}}$   $-40^{\circ}29'19''$  (B1950)  
 $12^{\text{h}}43^{\text{m}}13.1^{\text{s}}$   $-40^{\circ}45'45''$  (J2000)  
 $l: 301.25$   $b: 22.08$

DATE: 1980/ 12 - 1980/211  
 LIVETIME: 14814.4s

NH:  $7.7\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS:

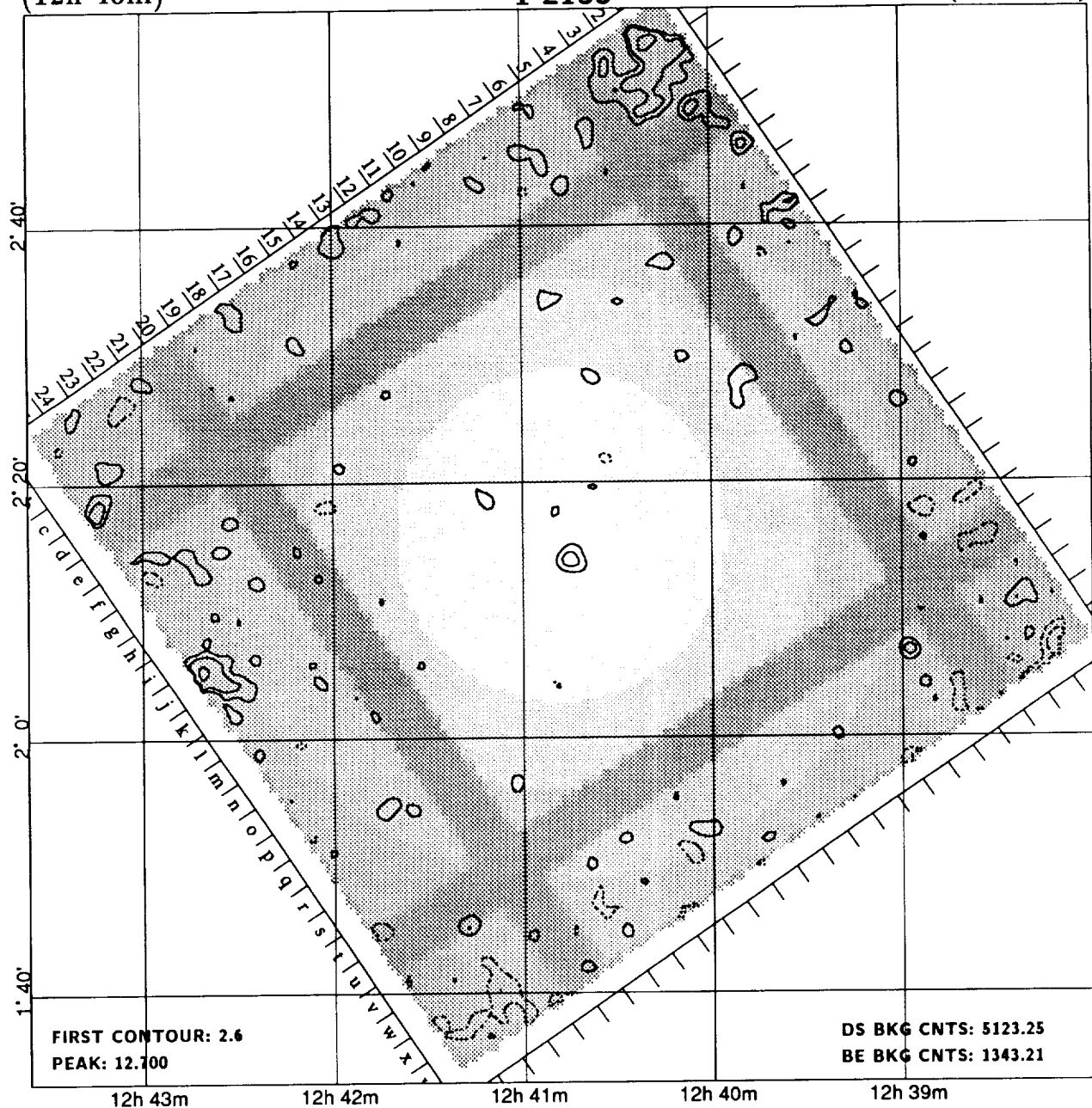
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT $\pm$ RATE	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2827	1	12 39 35.2	-40 22 16	41	0.0064 0.0011	59.7	44.3	5.9	0.8	0	12.2	AH
2842	2	12 41 43.0	-40 22 37	49	0.0109 0.0013	94.1	39.9	8.1	1.4	0	15.6	H
2843	3	12 41 44.2	-40 40 35	51	*0.0065 0.0011	52.6	29.4	5.8	1.2	1309	17.8	
2844	4	12 41 46.7	-40 37 16	51	*0.0048 0.0010	40.8	35.2	4.7	1.0	1007	17.0	
2845	5	12 41 48.9	-40 06 43	51	0.0077 0.0015	45.2	35.8	5.0	1.3	0	27.5	H



(12h 40m)

I 2133

(12h 40m)



**FIELD CENTER:**  $12^{\text{h}}40^{\text{m}}48.0^{\text{s}}$   $02^{\circ}14'59''$  (B1950)  
 $12^{\text{h}}43^{\text{m}}21.3^{\text{s}}$   $01^{\circ}58'34''$  (J2000)  
 $l: 298.19$   $b: 64.77$

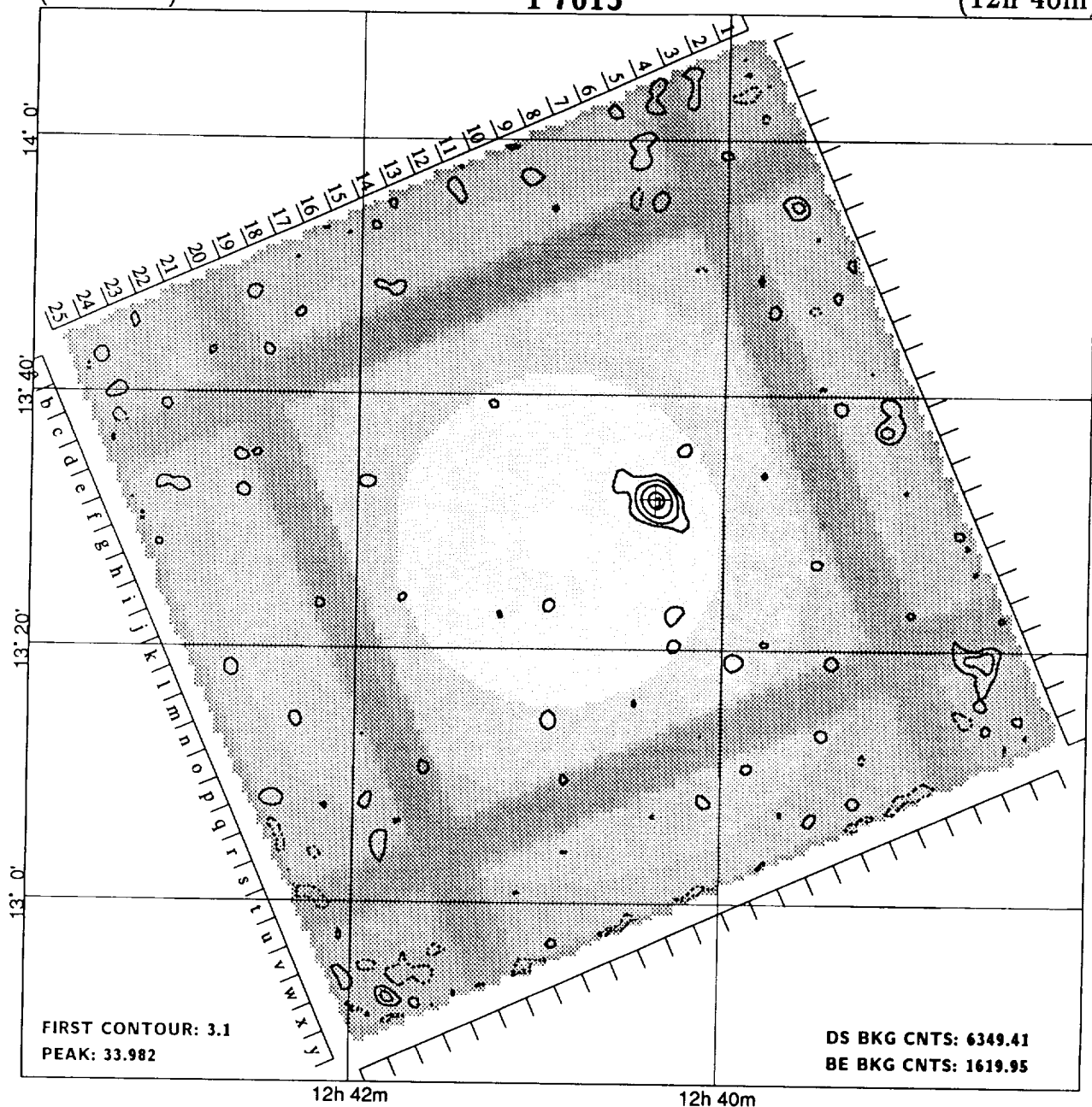
**DATE:** 1979/178 - 1980/171  
**LIVETIME:** 4151.5s  
**ROLL ANGLE:**  $55.9^{\circ}$

**NH:**  $1.8\text{E}+20$   
**REF/ID:**  
**FIELD FLAGS:** L

(12h 40m)

I 7013

(12h 40m)



## NGC 4639/4654, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}40^{\text{m}}54.0^{\text{s}}$   $13^{\circ}27'56''$  (B1950)  
 $12^{\text{h}}43^{\text{m}}24.8^{\text{s}}$   $13^{\circ}11'31''$  (J2000)  
 $\ell$ : 294.87  $b$ : 75.94

DATE: 1980/179 - 1980/179  
 LIVETIME: 5145.1s  
 ROLL ANGLE: 66.3°

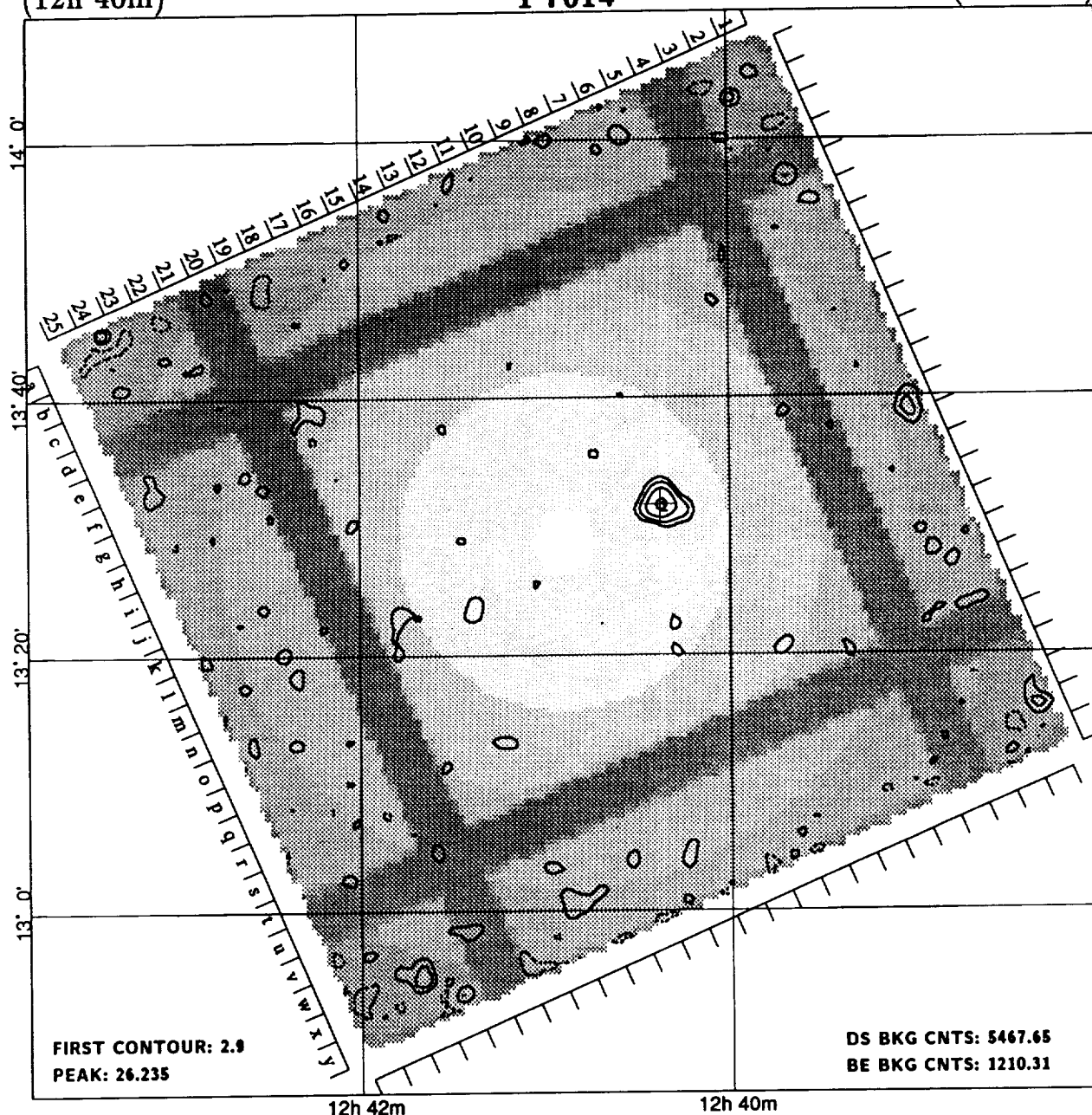
NH: 2.3E+20  
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2830	1	12 40 22.5	13 31 53	38	0.0319	0.0033	112.2	19.8	9.8	1.2	0	8.5	AH	

(12h 40m)

I 7014

(12h 40m)



## NGC 4639/4654,VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}40^{\text{m}}54.0^{\text{s}}$   $13^{\circ}27'56''$  (B1950)  
 $12^{\text{h}}43^{\text{m}}24.8^{\text{s}}$   $13^{\circ}11'31''$  (J2000)  
 $l: 294.87$   $b: 75.94$

DATE: 1980/180 - 1980/180  
 LIVETIME: 4430.6s  
 ROLL ANGLE:  $66.6^{\circ}$

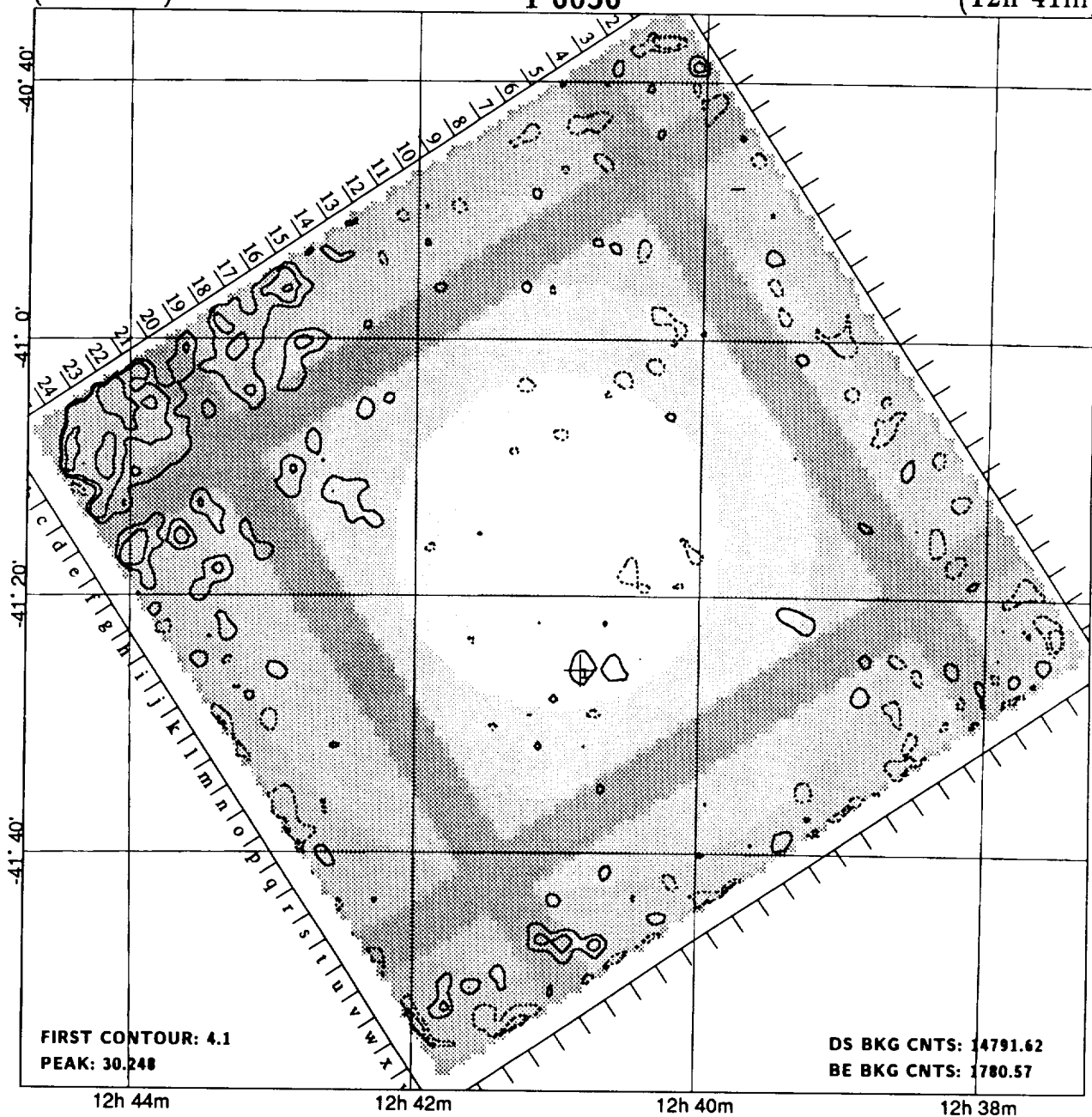
NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2830	1	12 40 22.7	13 31 39	38	0.0302	0.0034	91.9	17.1	8.8	1.1	0	8.5	AH	

(12h 41m)

I 6056

(12h 41m)



## CENTAURUS.DETAILED STUDY OF CLUSTER EXTENTS

FIELD CENTER:  $12^h 41^m 00.0^s$   $-41^\circ 16' 36''$  (B1950)  
 $12^h 43^m 44.6^s$   $-41^\circ 33' 02''$  (J2000)  
 $l: 301.39$   $b: 21.30$

DATE: 1980/212 - 1980/212

NH: 7.7E+20

LIVETIME: 11986.1s

REF/ID: CLG

ROLL ANGLE:  $56.6^\circ$ 

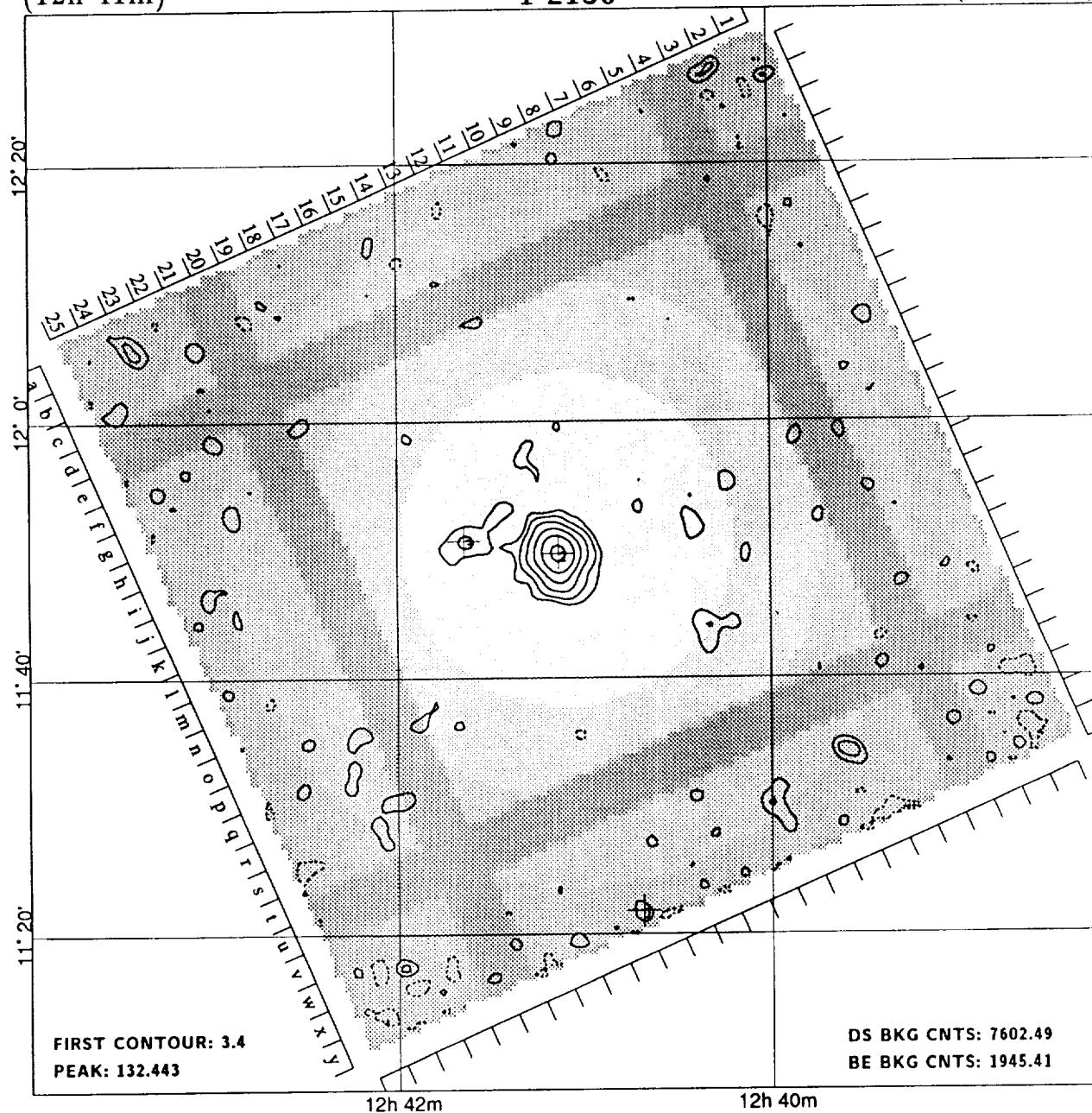
FIELD FLAGS: D

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2832	1	12 40 49.9	-41 25 47	46	0.0037	0.0010	29.3	35.7	3.6	0.6	0	9.4		

(12h 41m)

I 2130

(12h 41m)



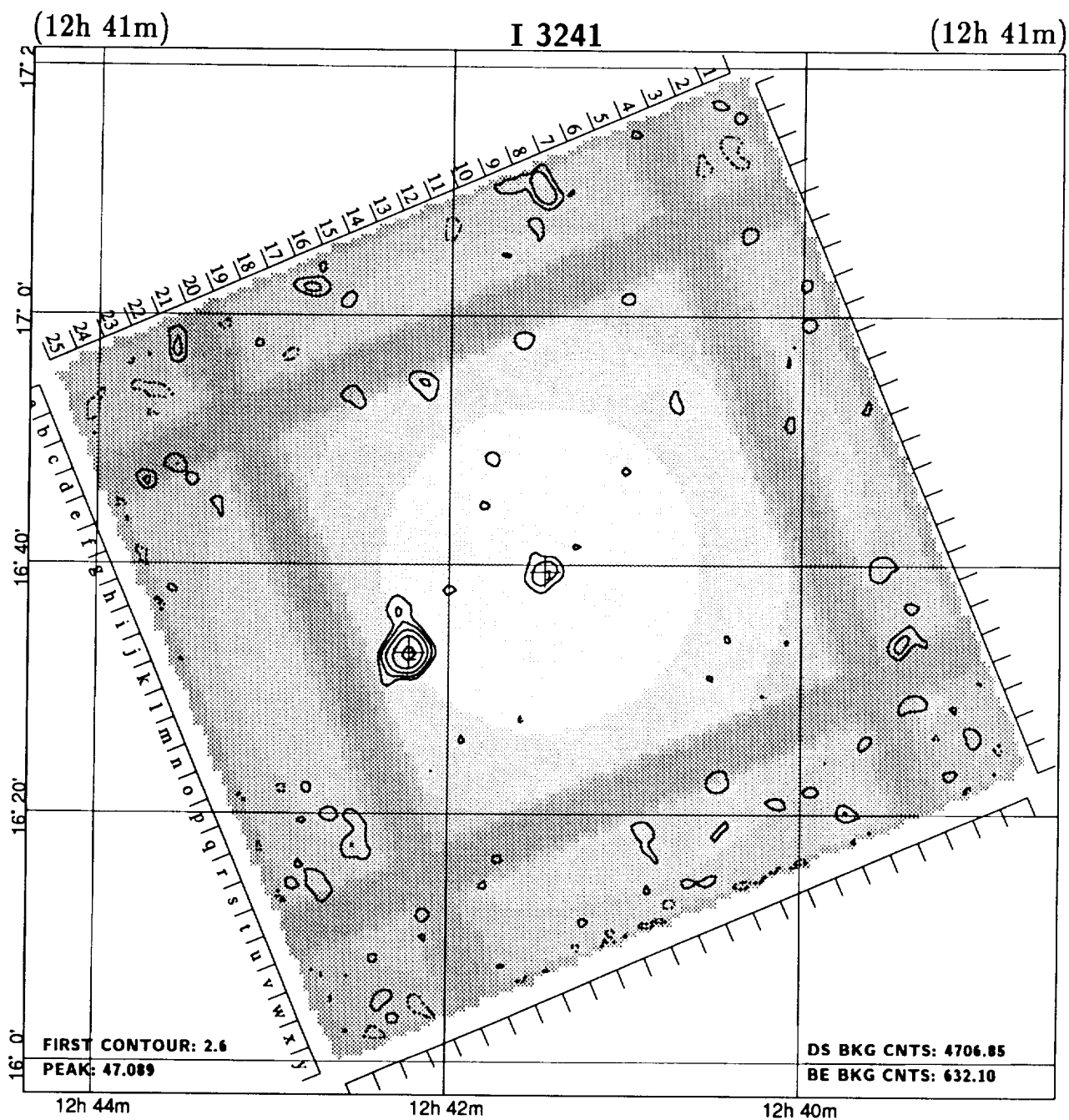
## X-RAY SURVEY OF NORMAL GALAXIES: NGC4649=M60

FIELD CENTER:  $12^h 41^m 06.0^s$   $11^\circ 49' 59''$  (B1950)  
 $12^h 43^m 37.2^s$   $11^\circ 33' 34''$  (J2000)  
 $l: 295.83$   $b: 74.32$

DATE: 1979/179 - 1979/179  
 LIVETIME: 6160.6s  
 ROLL ANGLE:  $66.4^\circ$

NH:  $2.4E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2831	1L	12 40 41.3	11 21 46	71	*0.0113	0.0031	27.5	5.2	3.6	0.5	601	28.9	I	
2835	2	12 41 08.2	11 49 42	31	0.1267	0.0054	578.7	26.3	23.5	1.5	0	0.8	AH	G
2839	3	12 41 38.5	11 50 40	43	0.0086	0.0018	36.0	23.0	4.7	1.5	0	7.7	H	



3C 275.1: DISTANT CLUSTERS ASSOCIATED WITH QSO'S

FIELD CENTER:  $12^{\text{h}}41^{\text{m}}28.0^{\text{s}}$   $16^{\circ}39'18''$  (B1950)  
 $12^{\text{h}}43^{\text{m}}58.0^{\text{s}}$   $16^{\circ}22'54''$  (J2000)  
 $l: 293.40$   $b: 79.11$

DATE: 1979/180 - 1979/180  
 LIVETIME: 3814.1s  
 ROLL ANGLE:  $67.0^{\circ}$

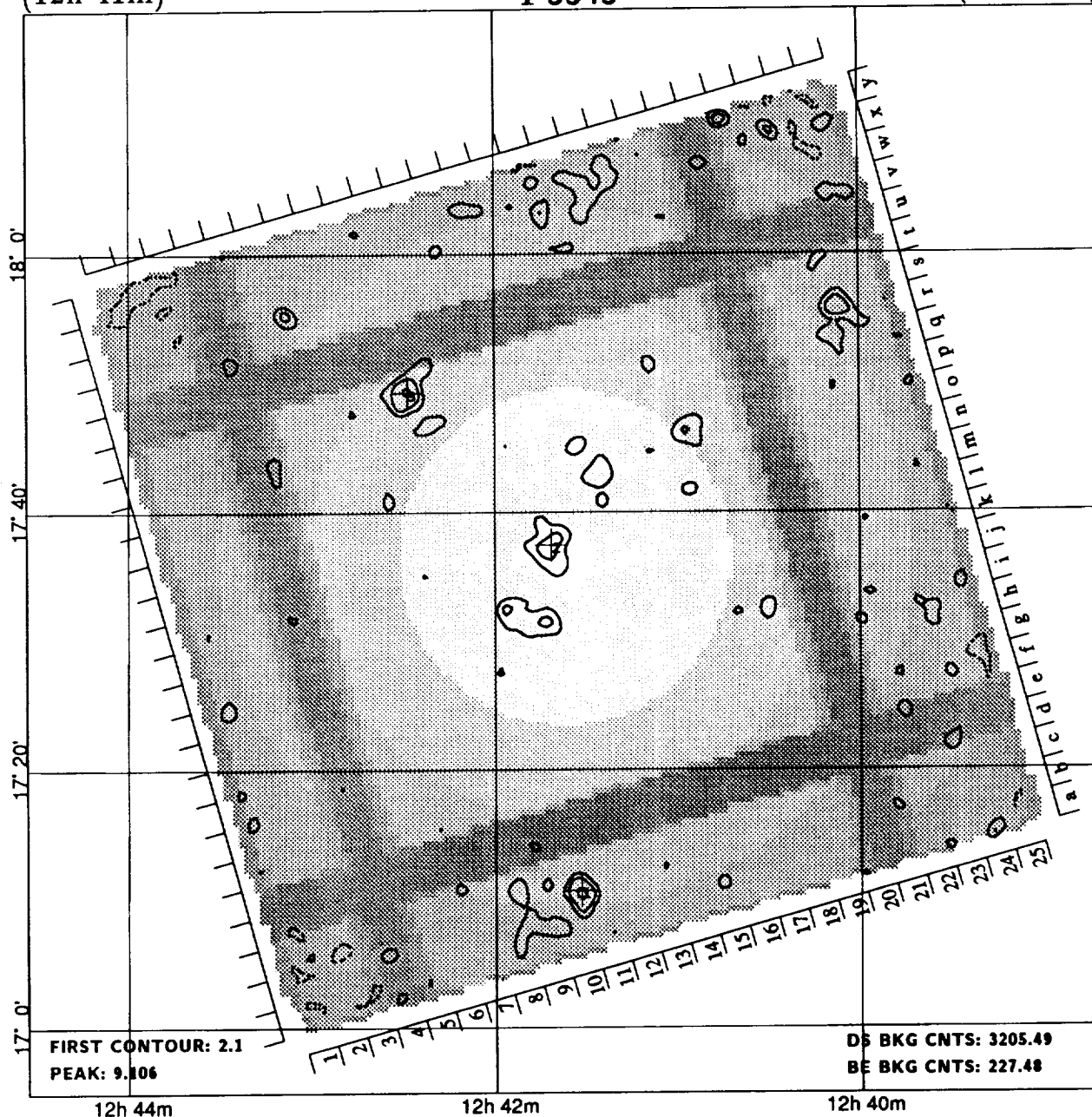
NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2836	1	12 41 27.3	16 39 26	36	0.0124	0.0024	35.2	12.8	5.1	0.9	0	0.2		
2848	2	12 42 13.5	16 32 53	38	0.0703	0.0056	168.8	11.2	12.6	1.2	0	12.5	H	AGN

(12h 41m)

I 5343

(12h 41m)



## SURVEY OF BRIGHT QUASARS (PG)

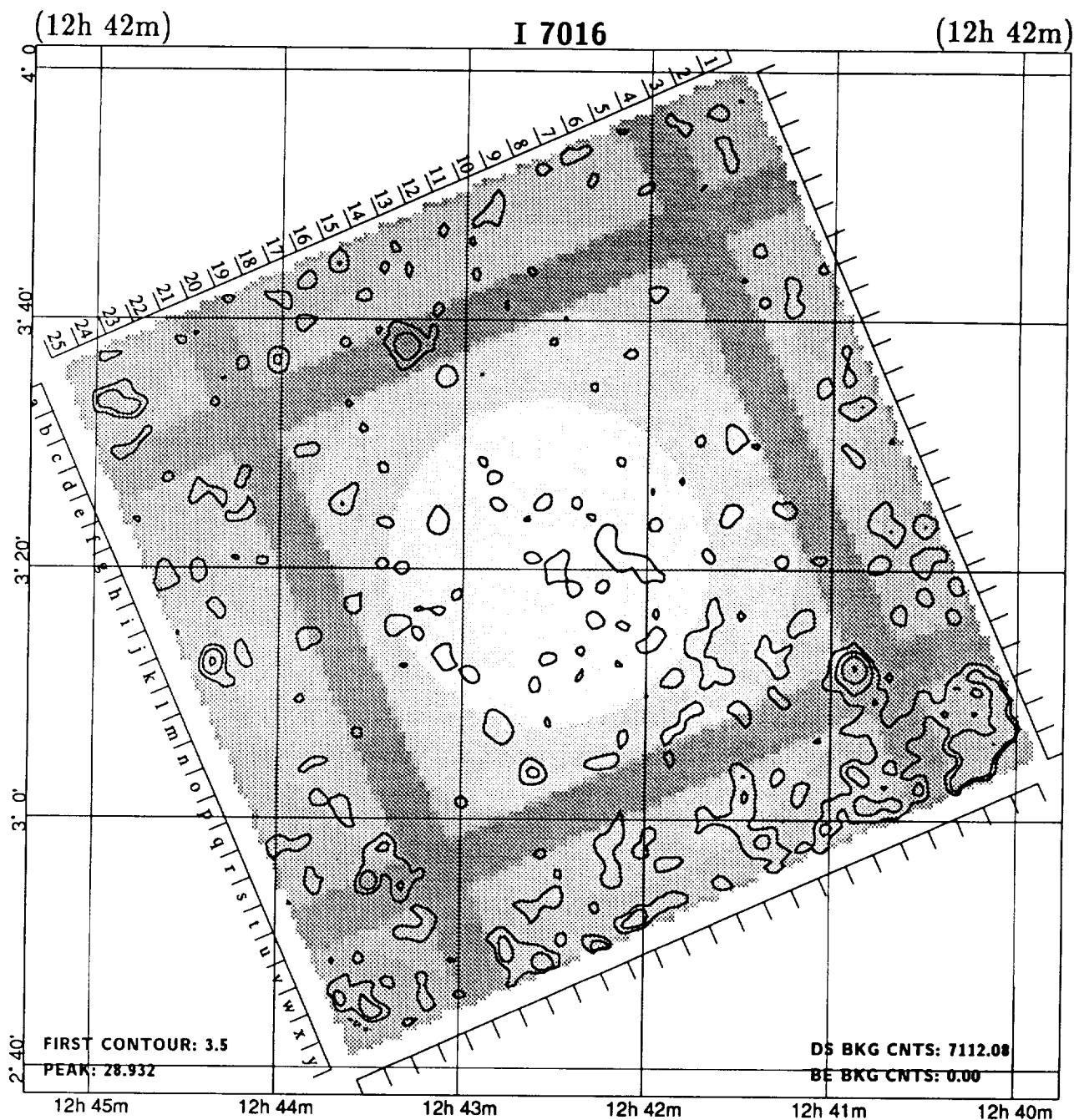
FIELD CENTER:  $12^{\text{h}}41^{\text{m}}37.1^{\text{s}}$   $17^{\circ}36'54''$  (B1950)  
 $12^{\text{h}}44^{\text{m}}06.9^{\text{s}}$   $17^{\circ}20'30''$  (J2000)  
 $l: 292.75$   $b: 80.07$

DATE: 1981/ 11 - 1981/ 11  
 LIVETIME: 2597.5s  
 ROLL ANGLE:  $-105.6^{\circ}$

NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2837	1	12 41 31.8	17 10 34	52	0.0180	0.0046	19.6	5.4	3.9	0.9	0	26.3	H	
2840	2	12 41 41.4	17 37 27	37	0.0142	0.0031	27.3	7.7	4.6	1.2	0	1.5	H	Q
2849	3	12 42 28.6	17 49 18	51	0.0185	0.0040	26.2	6.8	4.6	1.1	600	17.7	H	



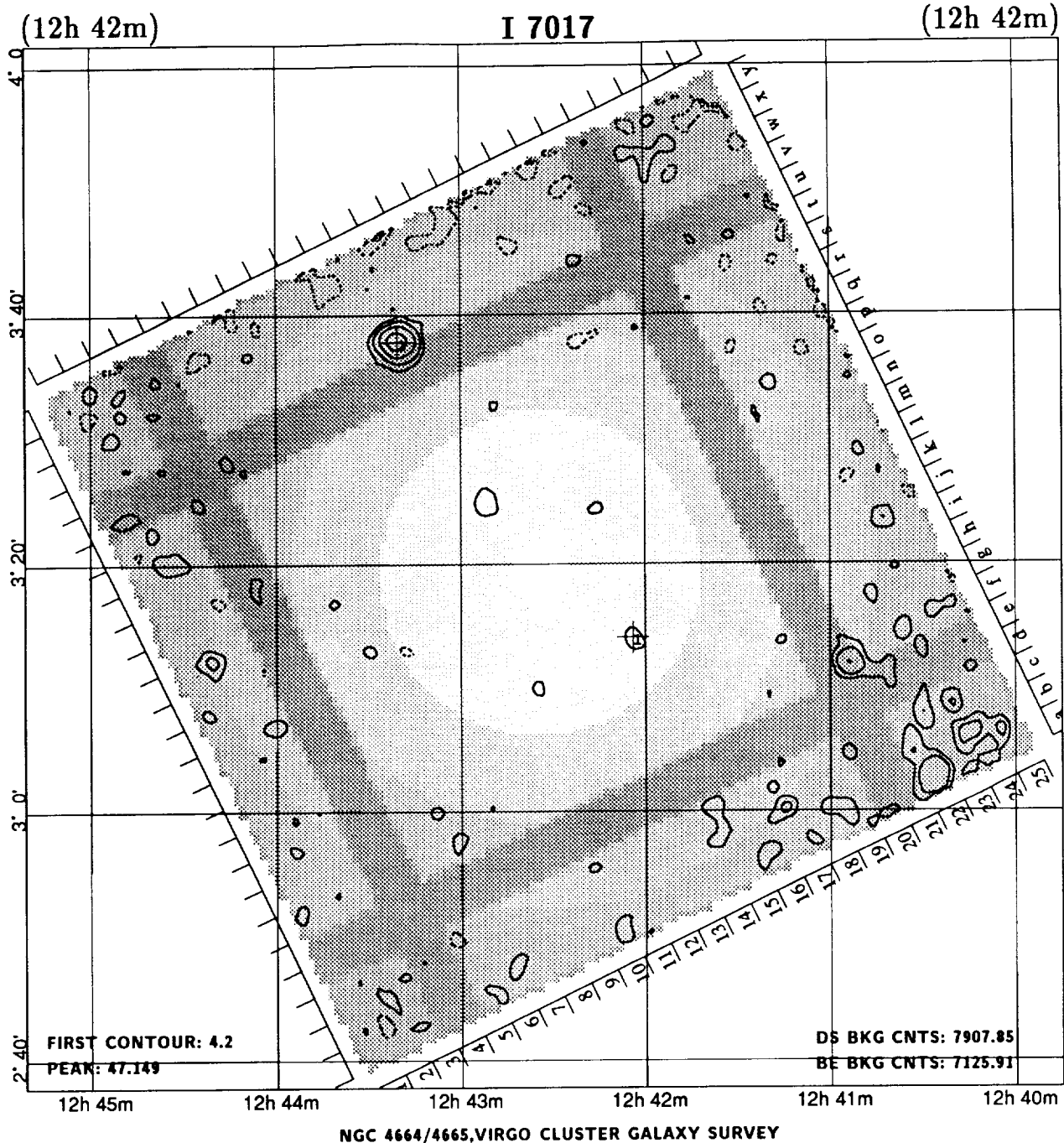


NGC 4664/4665, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}42^{\text{m}}33.0^{\text{s}}$   $03^{\circ}19'47''$  (B1950)  
 $12^{\text{h}}45^{\text{m}}06.0^{\text{s}}$   $03^{\circ}03'24''$  (J2000)  
 $l$ : 299.06  $b$ : 65.88

DATE: 1980/178 - 1980/178  
 LIVETIME: 5763.1s  
 ROLL ANGLE:  $66.3^{\circ}$

NH:  $1.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: CLS



FIELD CENTER:  $12^h 42^m 33.0^s$   $03^\circ 19' 47''$  (B1950)  
 $12^h 45^m 06.0^s$   $03^\circ 03' 24''$  (J2000)  
 $l: 299.06$   $b: 65.88$

DATE: 1980/347 - 1980/347  
 LIVETIME: 6408.1s  
 ROLL ANGLE:  $-115.7^\circ$

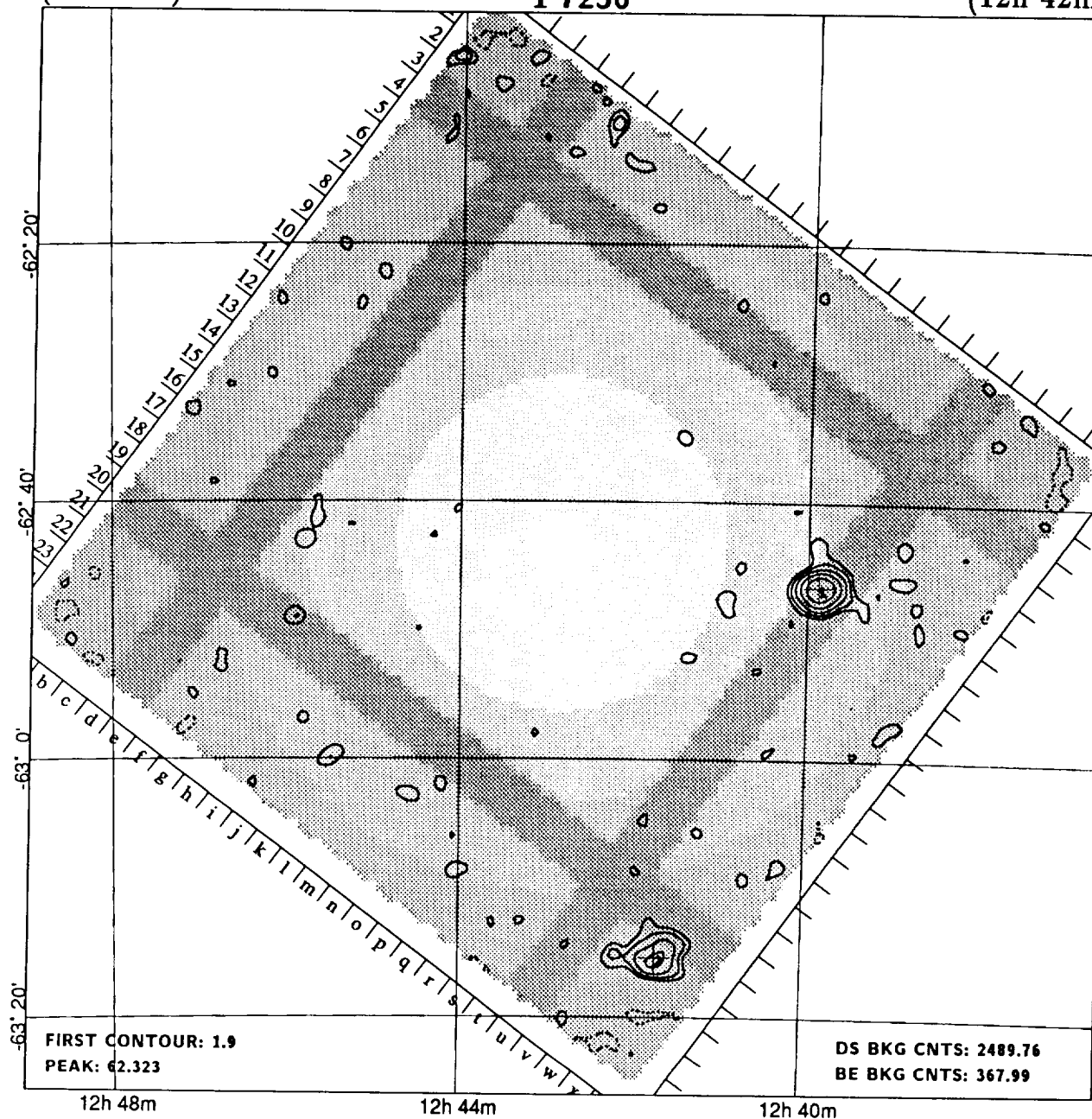
NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2846	1L	12 42 04.0	03 14 02	43	0.0099	0.0023	42.6	24.4	4.2	0.5	0	9.2	
2851	2L	12 43 20.5	03 37 48	48	*0.0479	0.0065	147.0	24.0	7.2	1.1	704	21.5	

(12h 42m)

I 7256

(12h 42m)



SS 36, STRONG EMISSION LINE STAR

FIELD CENTER:  $12^h 42^m 48.3^s$   $-62^\circ 44' 08''$  (B1950)  
 $12^h 45^m 47.1^s$   $-63^\circ 00' 32''$  (J2000)  
 $l: 302.29$   $b: -0.14$

DATE: 1980/238 - 1980/238  
 LIVETIME: 2017.6s  
 ROLL ANGLE:  $36.5^\circ$

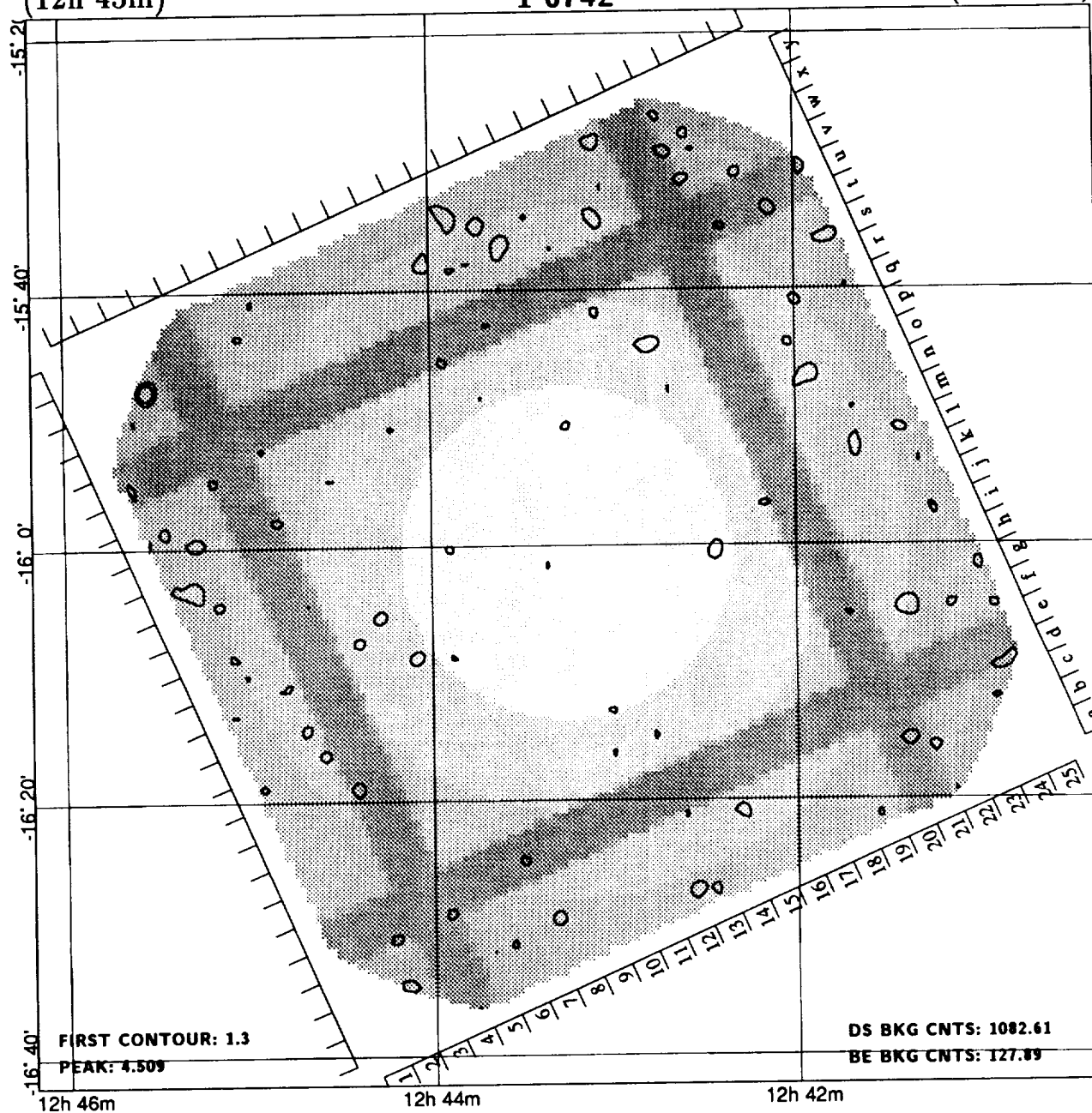
NH:  $1.5E+21$   
 REF/ID: S  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2828	1	12 39 52.8	-62 46 34	47	*0.149	0.012	151.3	3.7	12.1	1.1	1209	20.3	H	
2841	2	12 41 41.8	-63 15 24	51	*0.058	0.010	35.3	3.7	5.6	1.5	602	32.0	H	

(12h 43m)

I 6742

(12h 43m)



SEARCH FOR HIGH LX QSO'S: 18

FIELD CENTER:  $12^h 43^m 16.1^s$   $-16^\circ 00' 16''$  (B1950)  
 $12^h 45^m 53.6^s$   $-16^\circ 16' 40''$  (J2000)  
 $l: 301.00$   $b: 46.57$

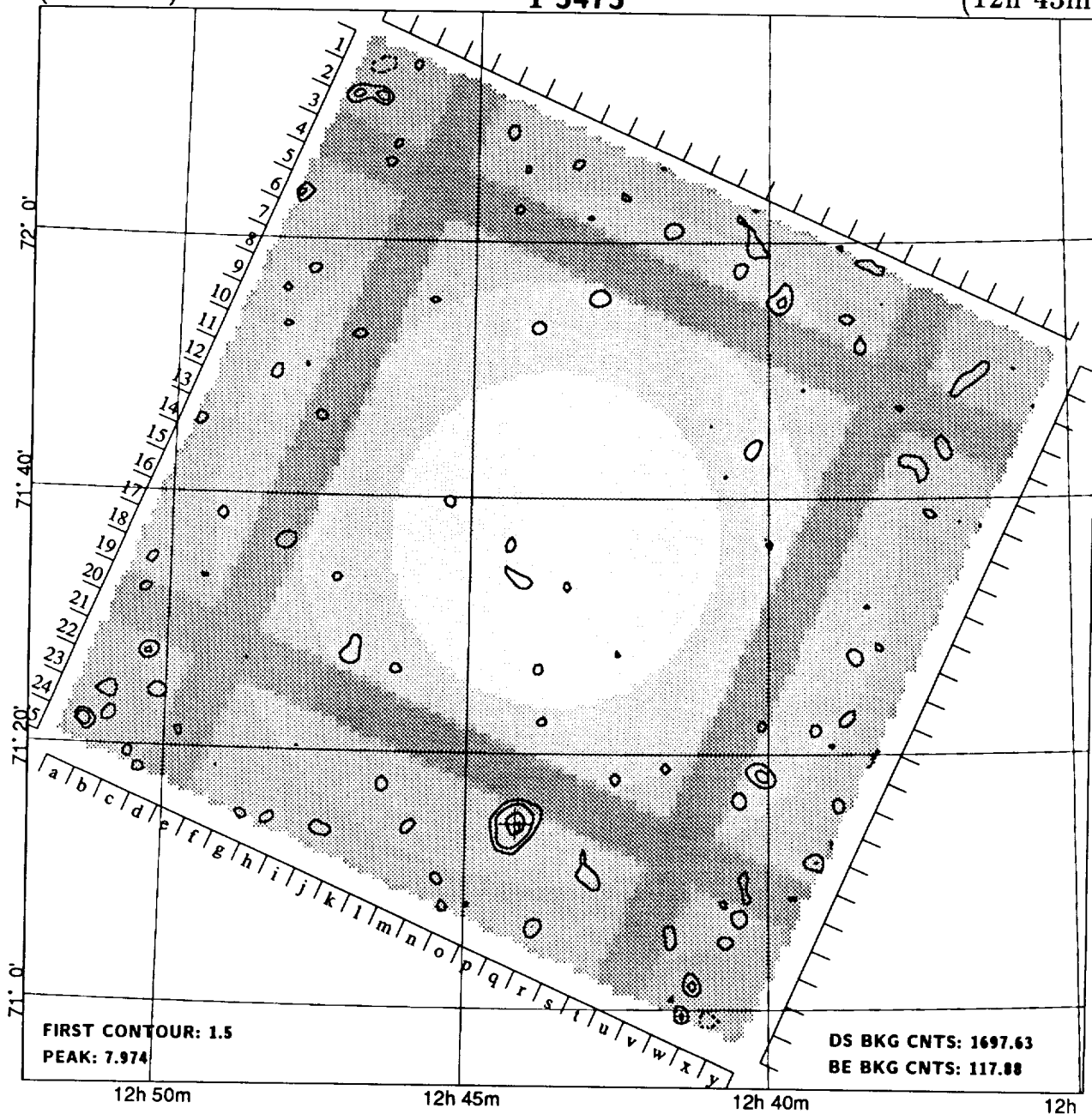
DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 877.3s  
 ROLL ANGLE:  $-113.8^\circ$

NH:  $3.9E+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 43m)

I 3473

(12h 43m)



## MKN 223, SEYFERT AND ACTIVE NUCLEI GALAXIES

FIELD CENTER:  $12^{\text{h}}43^{\text{m}}30.0^{\text{s}}$   $71^{\circ}35'59''$  (B1950)  
 $12^{\text{h}}45^{\text{m}}25.3^{\text{s}}$   $71^{\circ}19'36''$  (J2000)  
 $l: 123.62$   $b: 45.79$

DATE: 1979/118 - 1979/118  
 LIVETIME: 1375.7s  
 ROLL ANGLE:  $23.9^{\circ}$

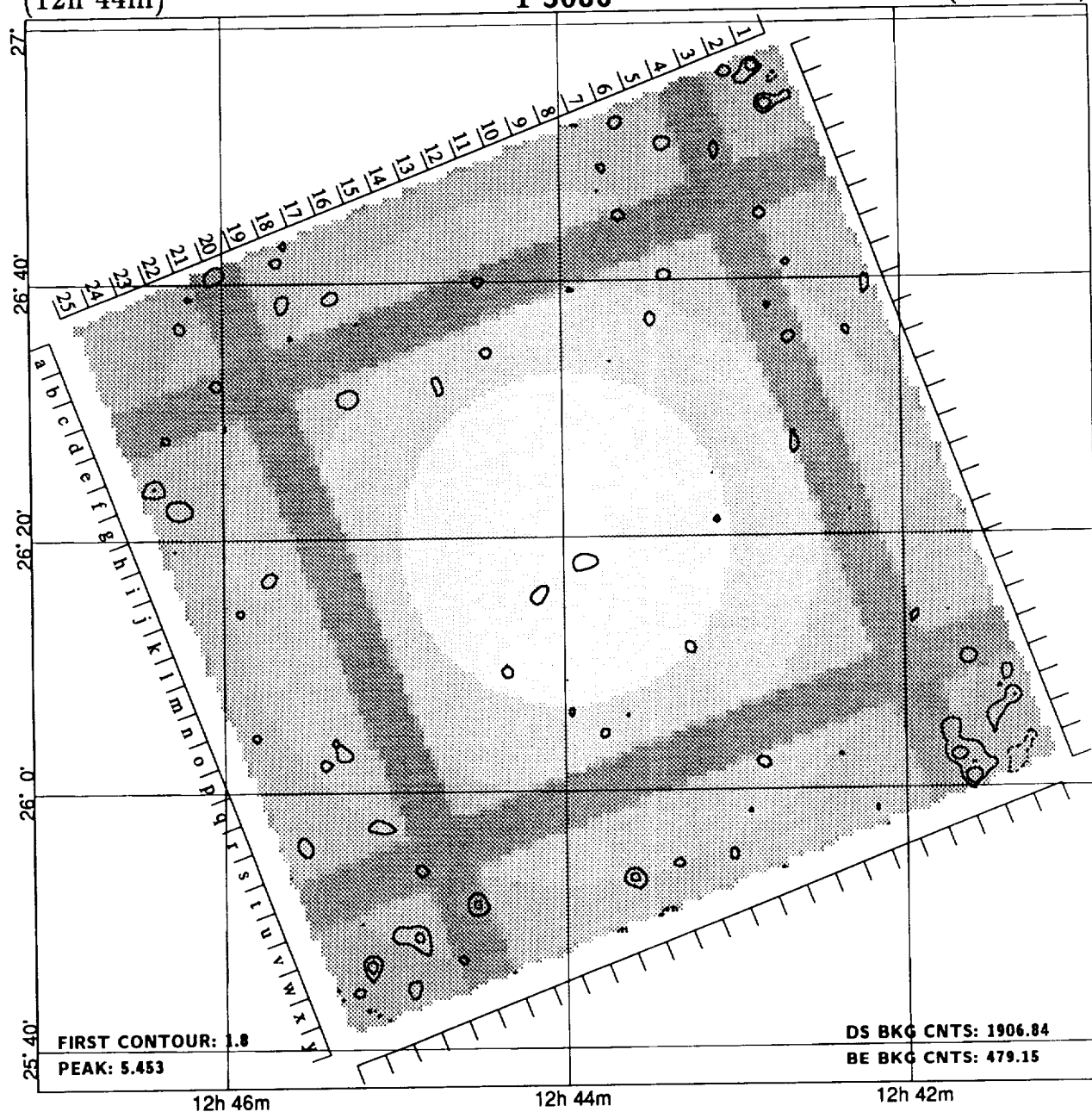
NH:  $1.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2855	1	12 44 10.5	71 14 26	52	*0.0360	0.0079	23.2	2.8	4.6	1.3	501	21.5	H

(12h 44m)

I 3086

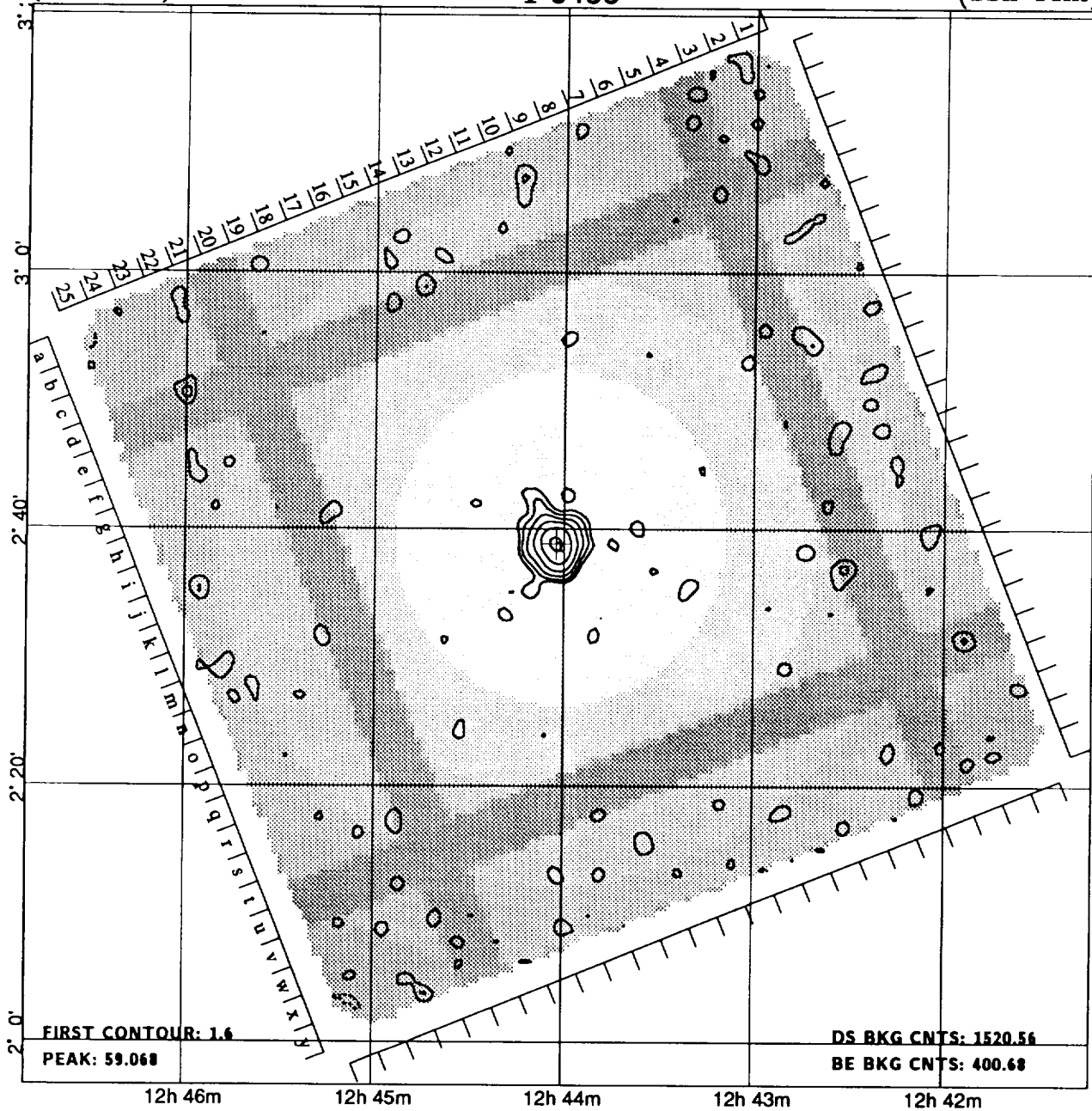
(12h 44m)



(12h 44m)

I 8433

(12h 44m)



## SURVEY OF BRIGHT (PG) QUASARS

FIELD CENTER:  $12^{\text{h}}44^{\text{m}}01.9^{\text{s}}$   $02^{\circ}38'34''$  (B1950)  
 $12^{\text{h}}46^{\text{m}}35.1^{\text{s}}$   $02^{\circ}22'12''$  (J2000)  
 $l: 300.04$   $b: 65.21$

DATE: 1980/195 - 1980/195

NH:  $1.8\text{E}+20$ 

LIVETIME: 1232.2s

REF/ID:

ROLL ANGLE:  $68.2^{\circ}$ 

FIELD FLAGS:

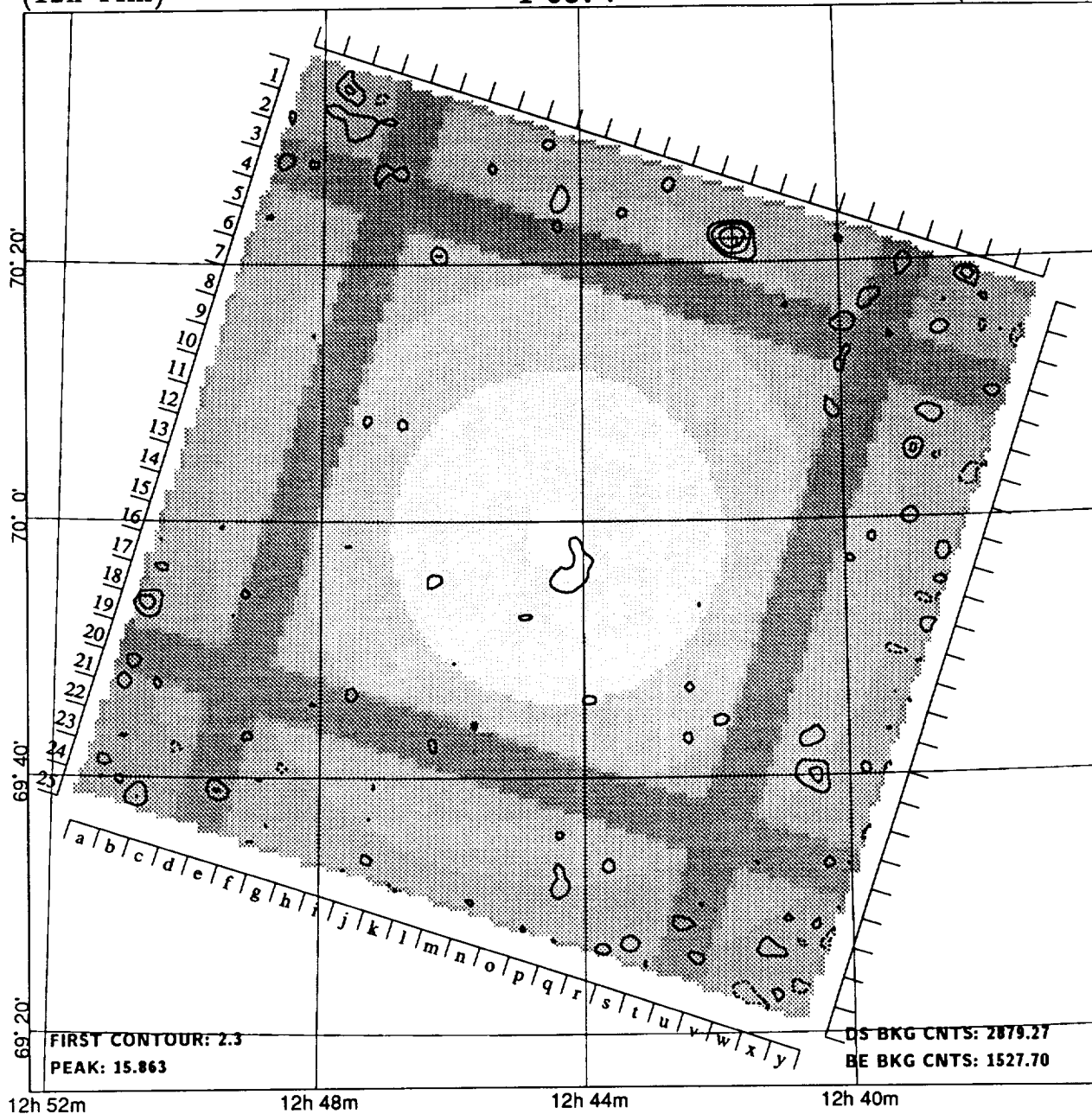
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2854	1	12 44 02.4	02 38 50	31	0.269	0.017	247.0	5.0	15.6	1.4	0	0.2	H	Q



(12h 44m)

I 6874

(12h 44m)



A1614, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $12^{\text{h}}44^{\text{m}}18.0^{\text{s}}$   $69^{\circ}57'59''$  (B1950)  
 $12^{\text{h}}46^{\text{m}}16.0^{\text{s}}$   $69^{\circ}41'37''$  (J2000)  
 $l: 123.60$   $b: 47.43$

DATE: 1980/112 - 1980/112  
 LIVETIME: 2416.9s  
 ROLL ANGLE:  $17.9^{\circ}$

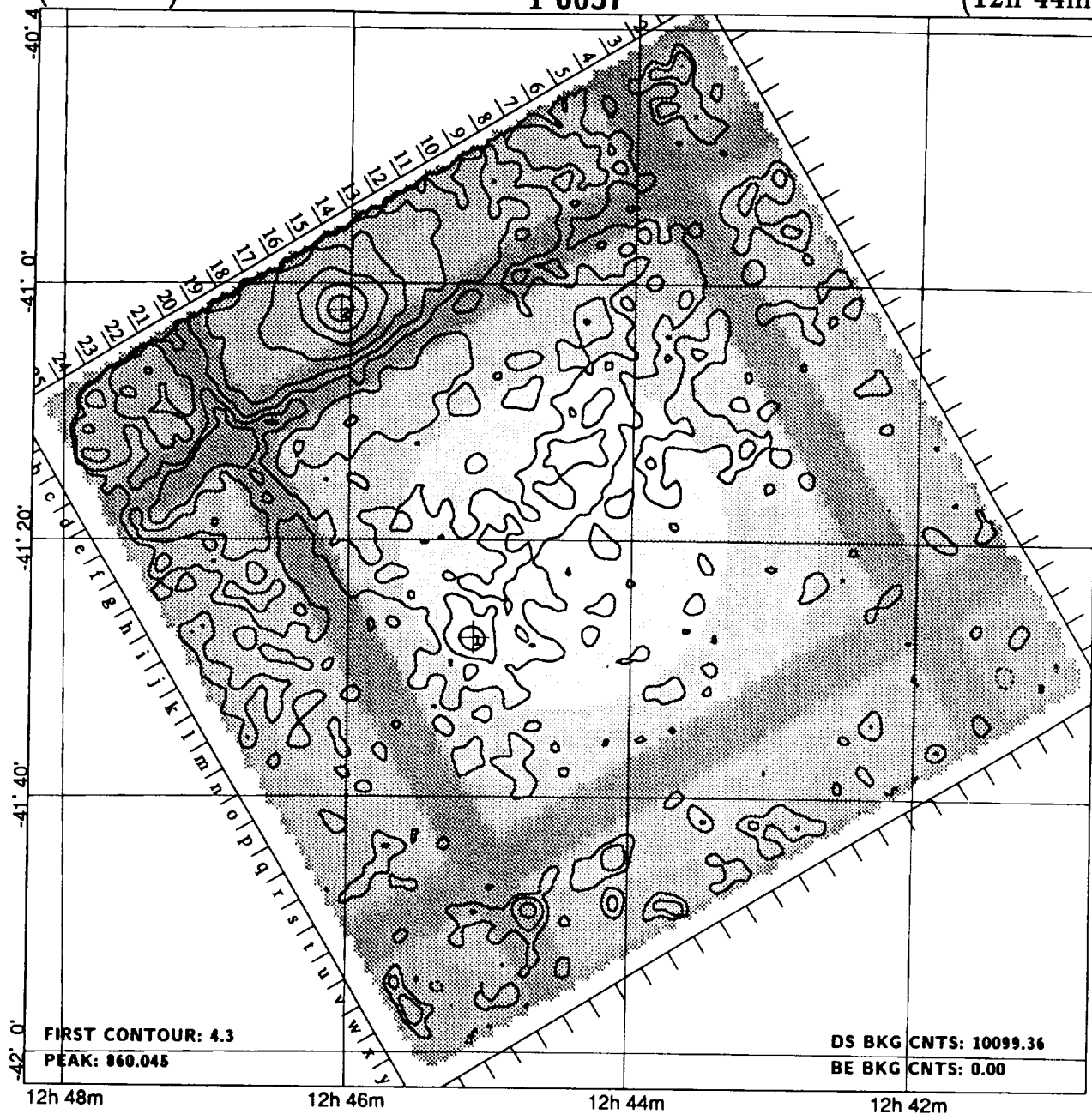
NH:  $1.5\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2838	1	12 41 38.4	70 21 50	51	0.0365	0.0067	35.2	6.8	5.4	1.0	0	27.3	H

(12h 44m)

I 6057

(12h 44m)



## CENTAURUS, DETAILED STUDY OF CLUSTER EXTENTS

FIELD CENTER:  $12^h 44^m 30.0^s$   $-41^\circ 20' 48''$  (B1950)  
 $12^h 47^m 15.5^s$   $-41^\circ 37' 11''$  (J2000)  
 $l: 302.09$   $b: 21.25$

DATE: 1980/208 - 1980/208  
 LIVETIME: 8183.8s  
 ROLL ANGLE:  $59.1^\circ$

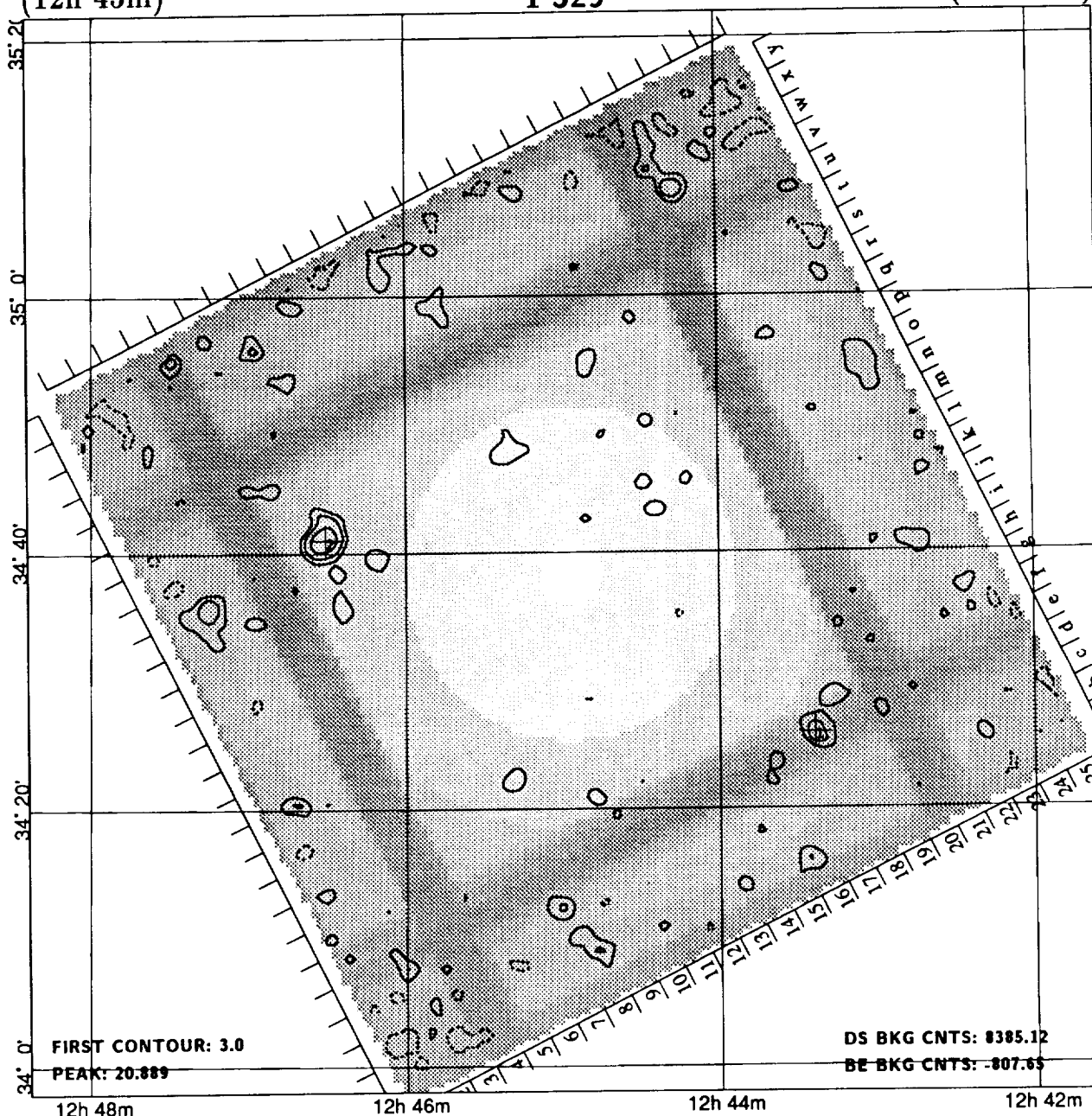
NH:  $7.7E+20$   
 REF/ID: CLG  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
2857	1L	12 45 06.8	-41 27 39	41	0.0116	0.0025	63.0	60.0	4.5	215.2	0	9.8	
2862	2L	12 46 04.0	-41 02 07	47	0.397	0.016	1378.8	833.2	24.1	6.4	100	25.7	A

(12h 45m)

I 529

(12h 45m)



## GROUP OF HIGH Z QUASARS QUASAR SURVEY

FIELD CENTER:  $12^{\text{h}}45^{\text{m}}00.0^{\text{s}}$   $34^{\circ}39'59''$  (B1950)  
 $12^{\text{h}}47^{\text{m}}24.5^{\text{s}}$   $34^{\circ}23'38''$  (J2000)  
 $l: 129.47$   $b: 82.68$

DATE: 1978/354 - 1978/354  
 LIVETIME: 6794.7s  
 ROLL ANGLE:  $-116.7^{\circ}$

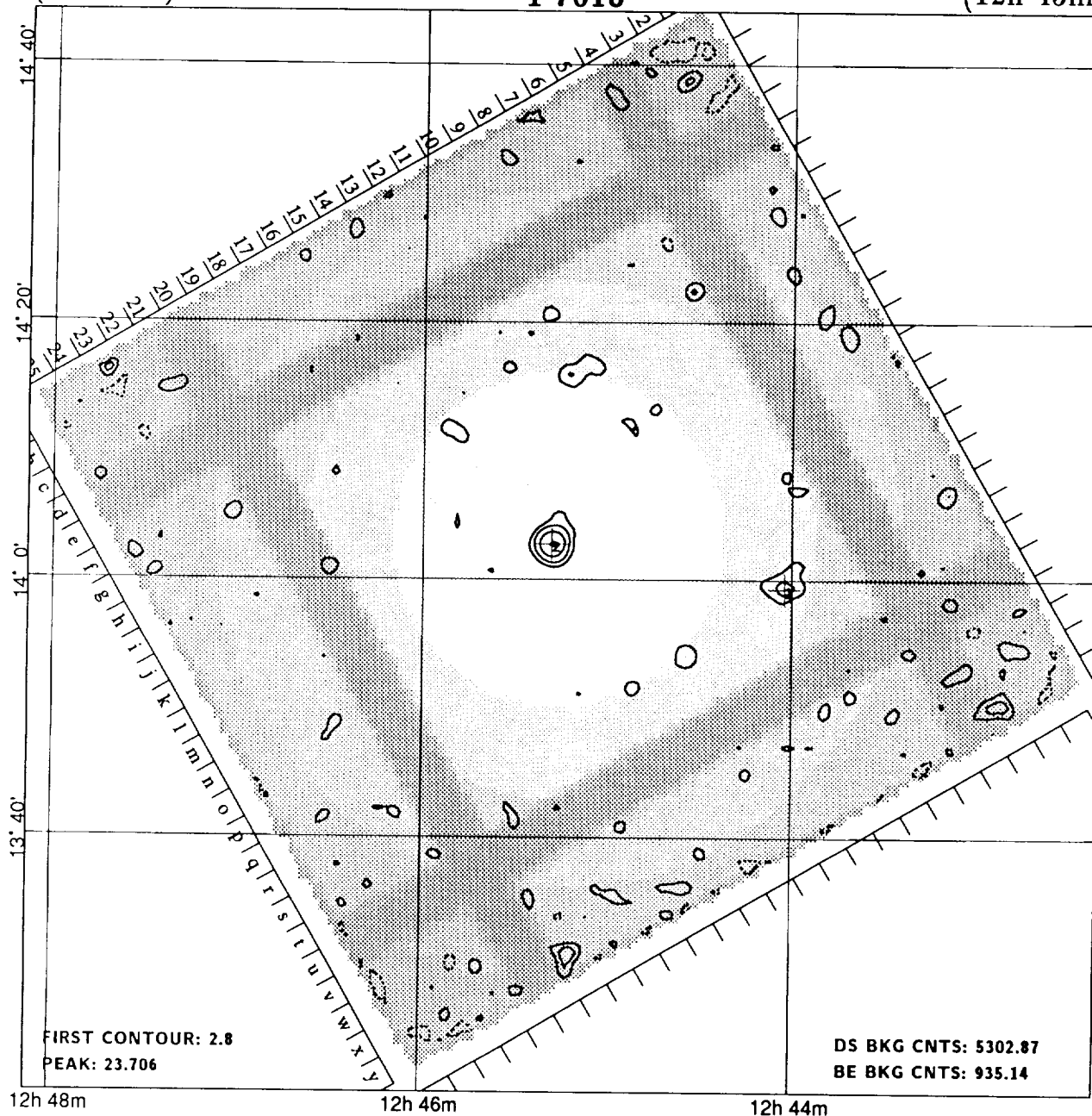
NH:  $1.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2852	1	12 43 23.7	34 25 55	56	*0.0075	0.0018	24.0	8.0	4.2	0.8	1209	23.8		
2866	2	12 46 30.7	34 41 00	50	0.0175	0.0025	62.0	13.0	7.2	1.1	0	18.8	H	Q

(12h 45m)

I 7018

(12h 45m)



## NGC 4689, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 45^m 15.0^s$   $14^\circ 02' 05''$  (B1950)  
 $12^h 47^m 45.4^s$   $13^\circ 45' 44''$  (J2000)  
 $l: 299.07$   $b: 76.61$

DATE: 1980/180 - 1980/180  
 LIVETIME: 4297.1s  
 ROLL ANGLE:  $59.9^\circ$

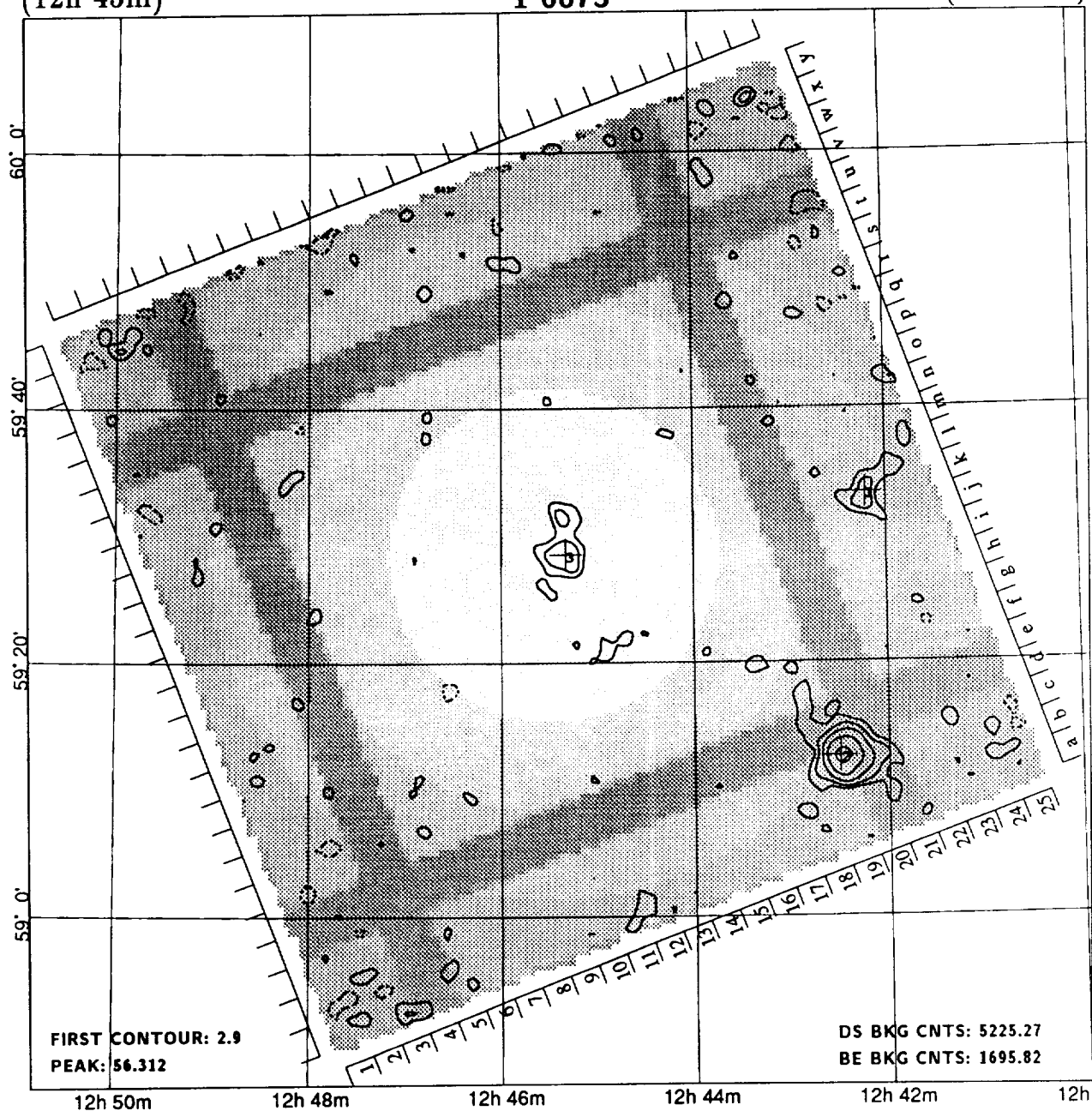
NH:  $2.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2853	1	12 44 02.4	13 59 16	55	0.0084	0.0024	19.5	11.5	3.5	1.0	0	17.7	H	
2858	2	12 45 18.1	14 02 45	32	0.0272	0.0032	87.1	16.9	8.5	1.0	0	0.9	H	

(12h 45m)

I 6875

(12h 45m)



A1617, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $12^h 45^m 24.0^s$   $59^\circ 28' 59''$  (B1950)  
 $12^h 47^m 35.0^s$   $59^\circ 12' 38''$  (J2000)  
 $l: 123.86$   $b: 57.91$

DATE: 1980/357 - 1980/357  
 LIVETIME: 4234.2s  
 ROLL ANGLE:  $-111.0^\circ$

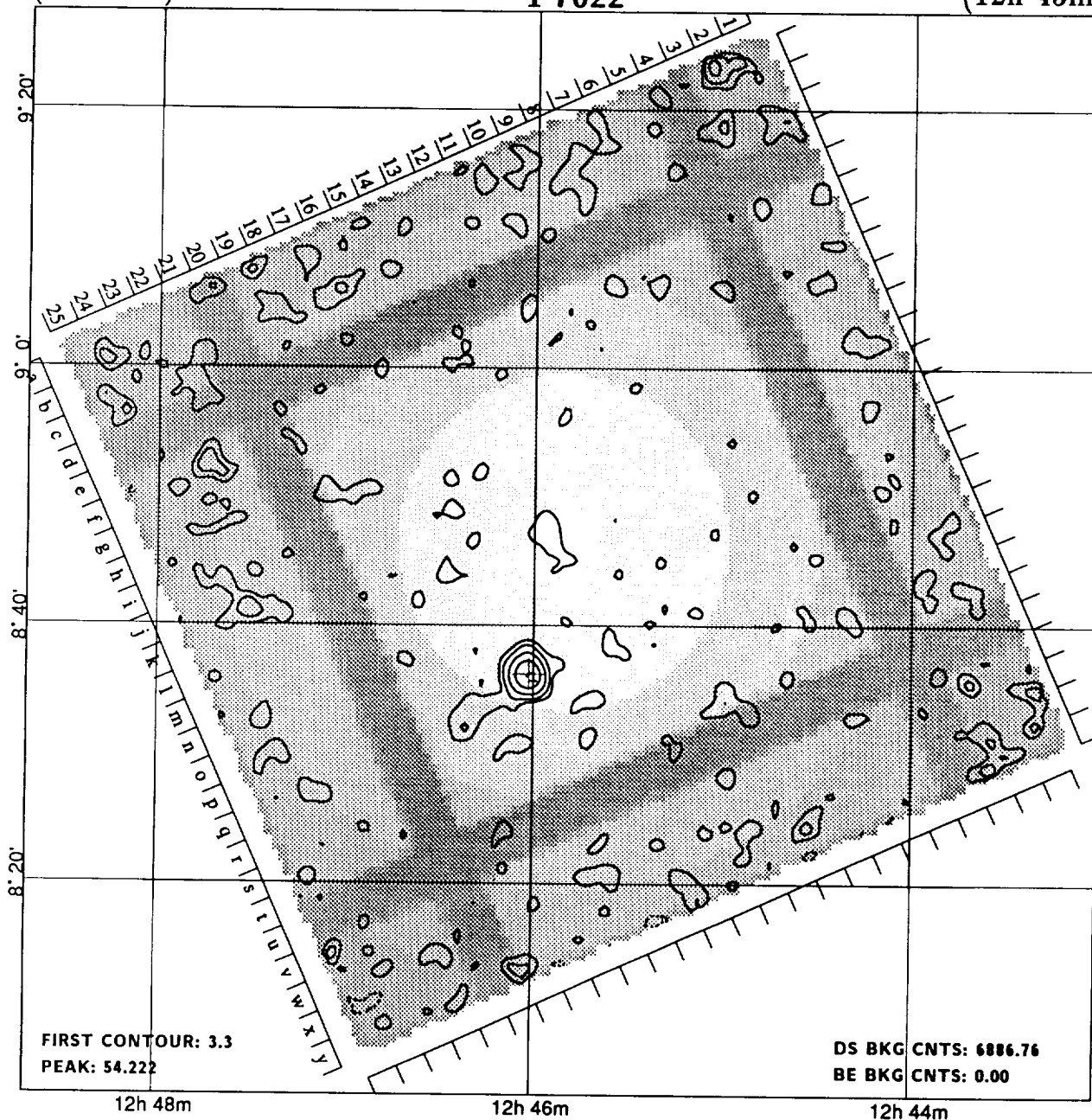
NH:  $1.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2847	1	12 42 12.7	59 33 19	58	0.0114	0.0031	20.6	11.4	3.6	1.3	0	24.6	H	
2850	2	12 42 30.1	59 12 37	48	*0.0801	0.0072	132.3	9.7	11.1	1.5	1106	27.5	H	
2859	3	12 45 19.7	59 28 35	35	0.0166	0.0027	52.4	19.6	6.2	1.7	0	0.6	H	CLG

(12h 45m)

I 7022

(12h 45m)



## NGC 4698, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 45^m 51.6^s$   $08^\circ 45' 35''$  (B1950)  
 $12^h 48^m 23.3^s$   $08^\circ 29' 14''$  (J2000)  
 $l: 300.57$   $b: 71.35$

DATE: 1980/178 - 1980/178  
 LIVETIME: 5580.6s  
 ROLL ANGLE:  $66.0^\circ$

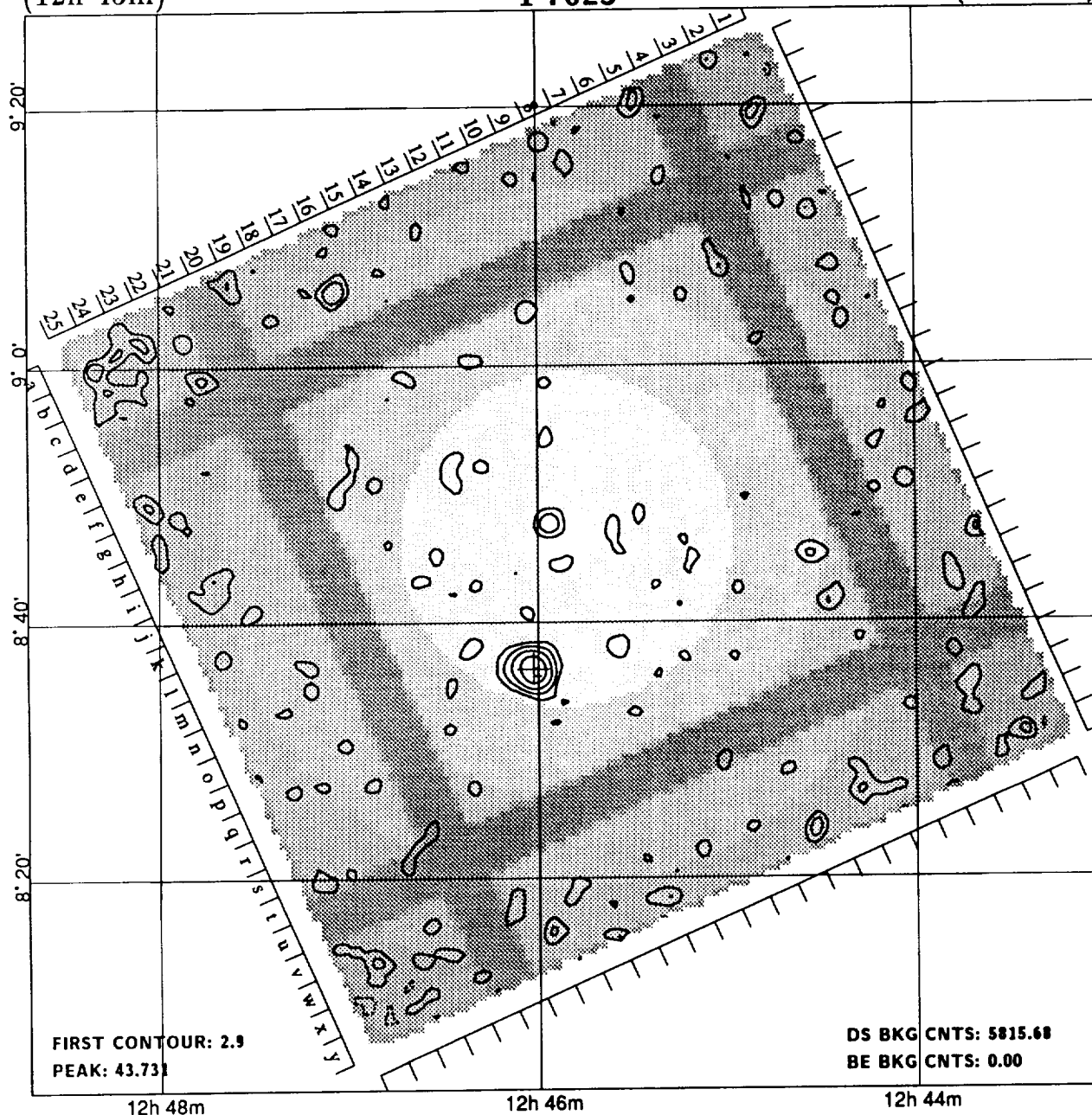
NH:  $1.8E+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2861	1L	12 46 01.4	08 36 17	38	0.0436	0.0044	160.5	37.5	9.7	1.4	0	9.7	A	

(12h 45m)

I 7023

(12h 45m)



## NGC 4698, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 45^m 51.6^s$   $08^\circ 45' 35''$  (B1950)  
 $12^h 48^m 23.3^s$   $08^\circ 29' 14''$  (J2000)  
 $l: 300.57$   $b: 71.35$

DATE: 1980/179 - 1980/179  
 LIVETIME: 4712.6s  
 ROLL ANGLE:  $66.2^\circ$

NH:  $1.8E+20$   
 REF/ID: I  
 FIELD FLAGS: CL

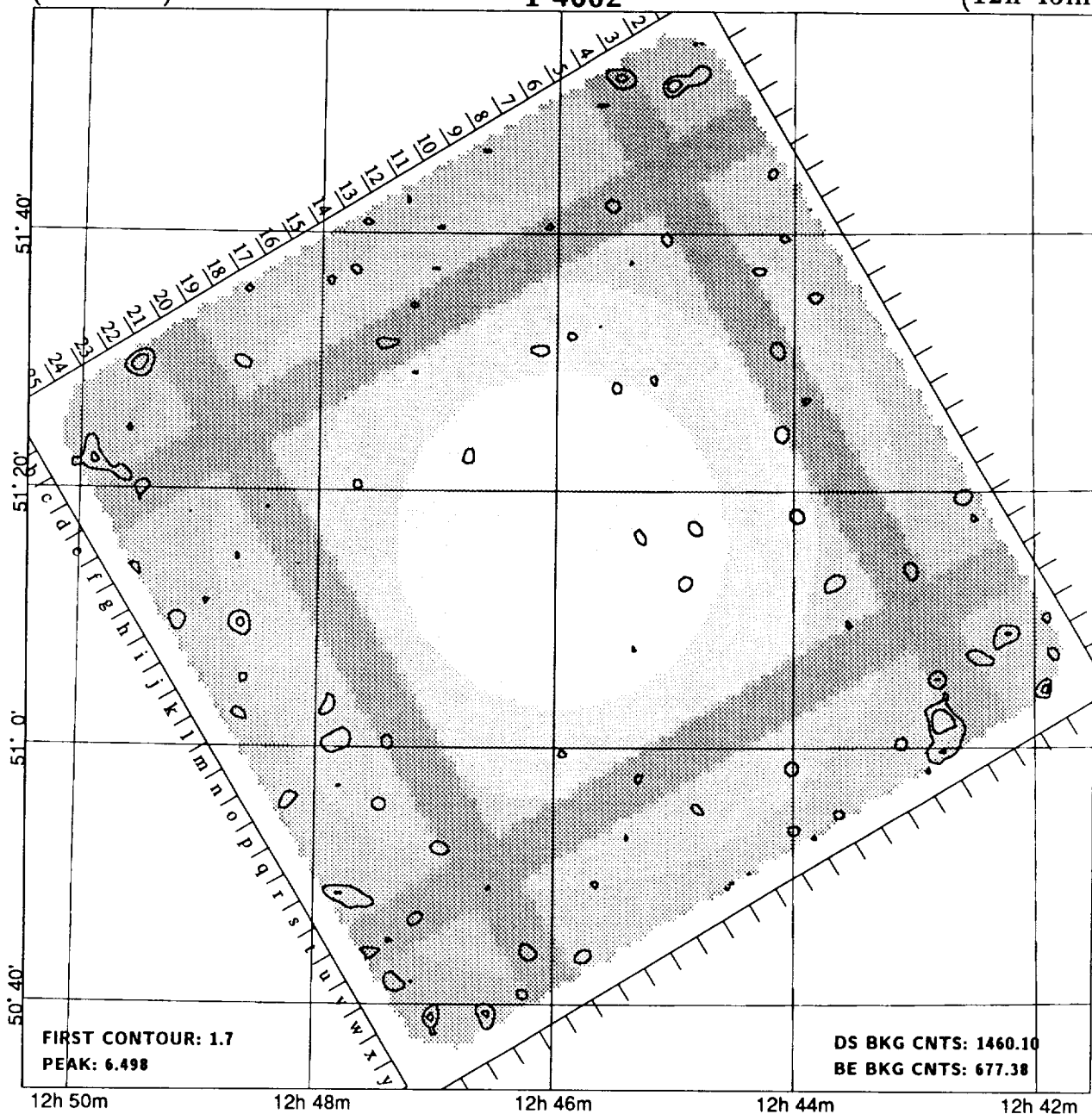
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2861	1L	12 46 01.5	08 36 18	38	0.0448	0.0049	139.4	34.6	9.0	1.2	0	9.6	A	



(12h 45m)

I 4602

(12h 45m)



## MKN 227: S-TYPE MARKARIAN GALAXY

FIELD CENTER:  $12^{\text{h}}45^{\text{m}}57.8^{\text{s}}$   $51^{\circ}15'21''$  (B1950)  
 $12^{\text{h}}48^{\text{m}}14.6^{\text{s}}$   $50^{\circ}59'00''$  (J2000)  
 $l$ : 124.17  $b$ : 66.14

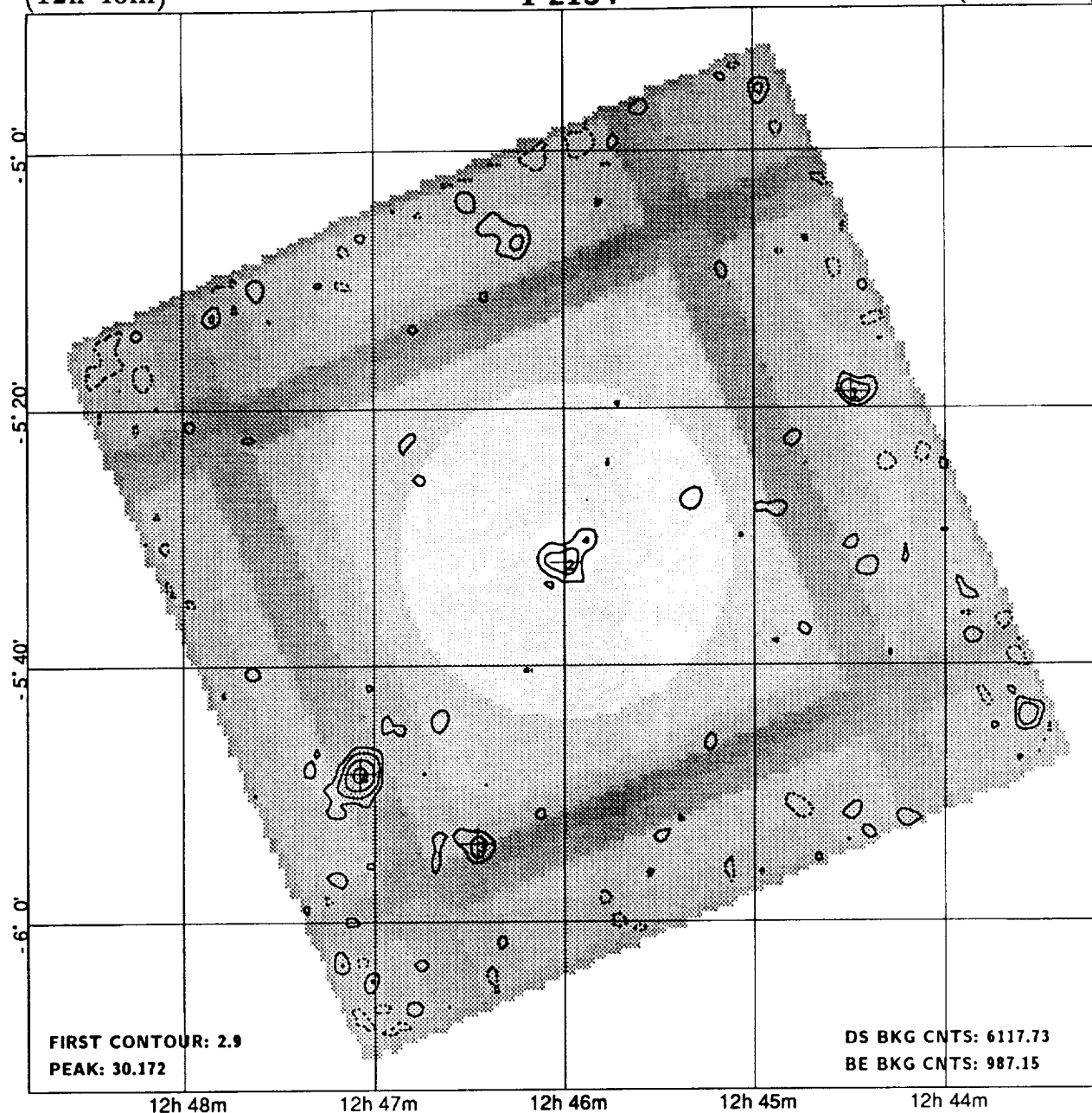
DATE: 1980/158 - 1980/158  
 LIVETIME: 1183.2s  
 ROLL ANGLE:  $59.1^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(12h 46m)

I 2134

(12h 46m)



## X-RAY SURVEY OF NORMAL GALAXIES: NGC4697

FIELD CENTER:  $12^{\text{h}}46^{\text{m}}00.0^{\text{s}}$   $-05^{\circ}30'59''$  (B1950)  
 $12^{\text{h}}48^{\text{m}}35.1^{\text{s}}$   $-05^{\circ}47'20''$  (J2000)  
 $l: 301.63$   $b: 57.08$

DATE: 1979/178 - 1980/ 19  
 LIVETIME: 4957.4s

NH:  $2.0\text{E}+20$ 

REF/ID:

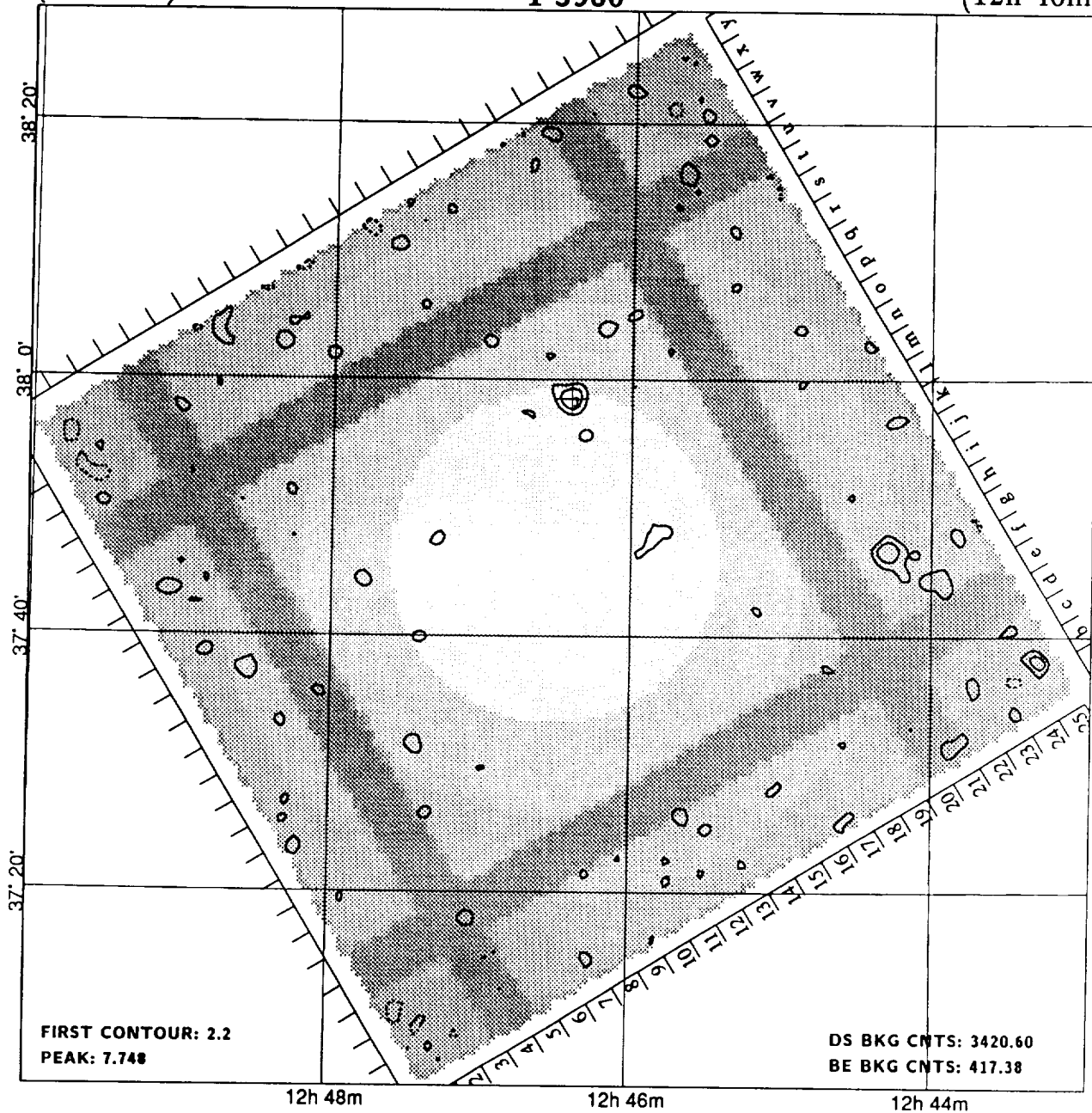
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2856	1	12 44 29.6	-05 18 45	55	0.0095	0.0027	19.9	12.1	3.5	0.8	100	25.7	H	
2860	2	12 45 59.4	-05 31 57	35	0.0114	0.0021	42.1	17.9	5.4	1.3	0	0.9	H	G
2864	3	12 46 27.6	-05 53 57	57	*0.0085	0.0024	19.0	9.0	3.6	0.8	1308	23.8		
2867	4	12 47 04.6	-05 48 24	50	*0.0280	0.0038	62.4	8.6	7.4	1.3	1509	23.6	A	S

(12h 46m)

I 3980

(12h 46m)



## AB 9, BRIGHT OPTICALLY-SELECTED QUASAR

FIELD CENTER:  $12^{\text{h}}46^{\text{m}}28.7^{\text{s}}$   $37^{\circ}46'49''$  (B1950)  
 $12^{\text{h}}48^{\text{m}}51.8^{\text{s}}$   $37^{\circ}30'29''$  (J2000)  
 $l: 125.76$   $b: 79.61$

DATE: 1979/342 - 1979/342  
 LIVETIME: 2771.8s  
 ROLL ANGLE:  $-121.3^{\circ}$

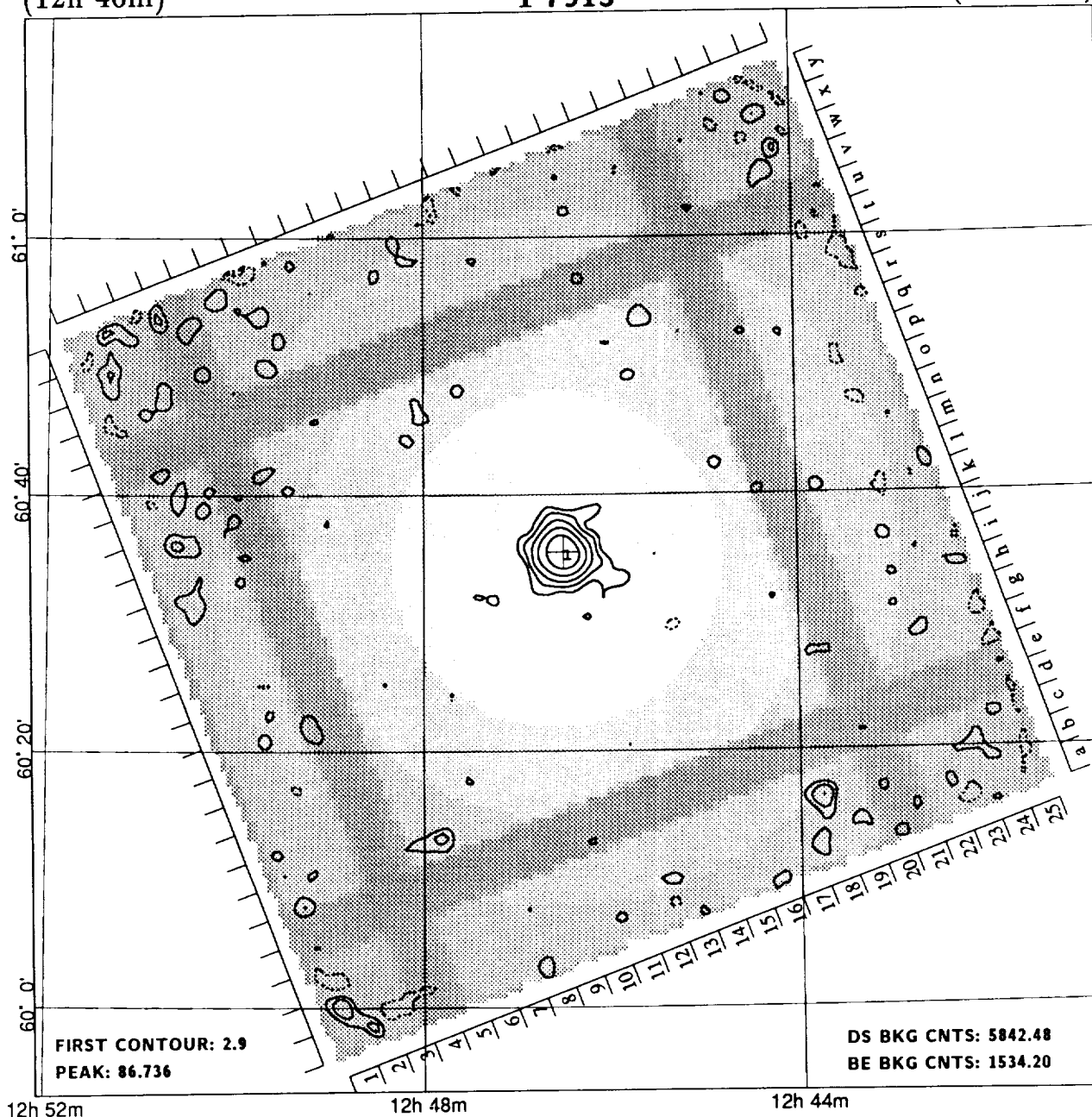
NH:  $1.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2863	1	12 46 24.3	37 58 31	42	0.0132	0.0032	23.1	8.9	4.1	0.8	0	11.9	H	

(12h 46m)

I 7913

(12h 46m)



FIELD CENTER:  $12^{\text{h}}46^{\text{m}}29.3^{\text{s}}$   $60^{\circ}35'31''$  (B1950)  
 $12^{\text{h}}48^{\text{m}}38.7^{\text{s}}$   $60^{\circ}19'11''$  (J2000)  
 $l: 123.56$   $b: 56.81$

DATE: 1980/357 - 1980/357  
 LIVETIME: 4734.4s  
 ROLL ANGLE:  $-110.7^{\circ}$

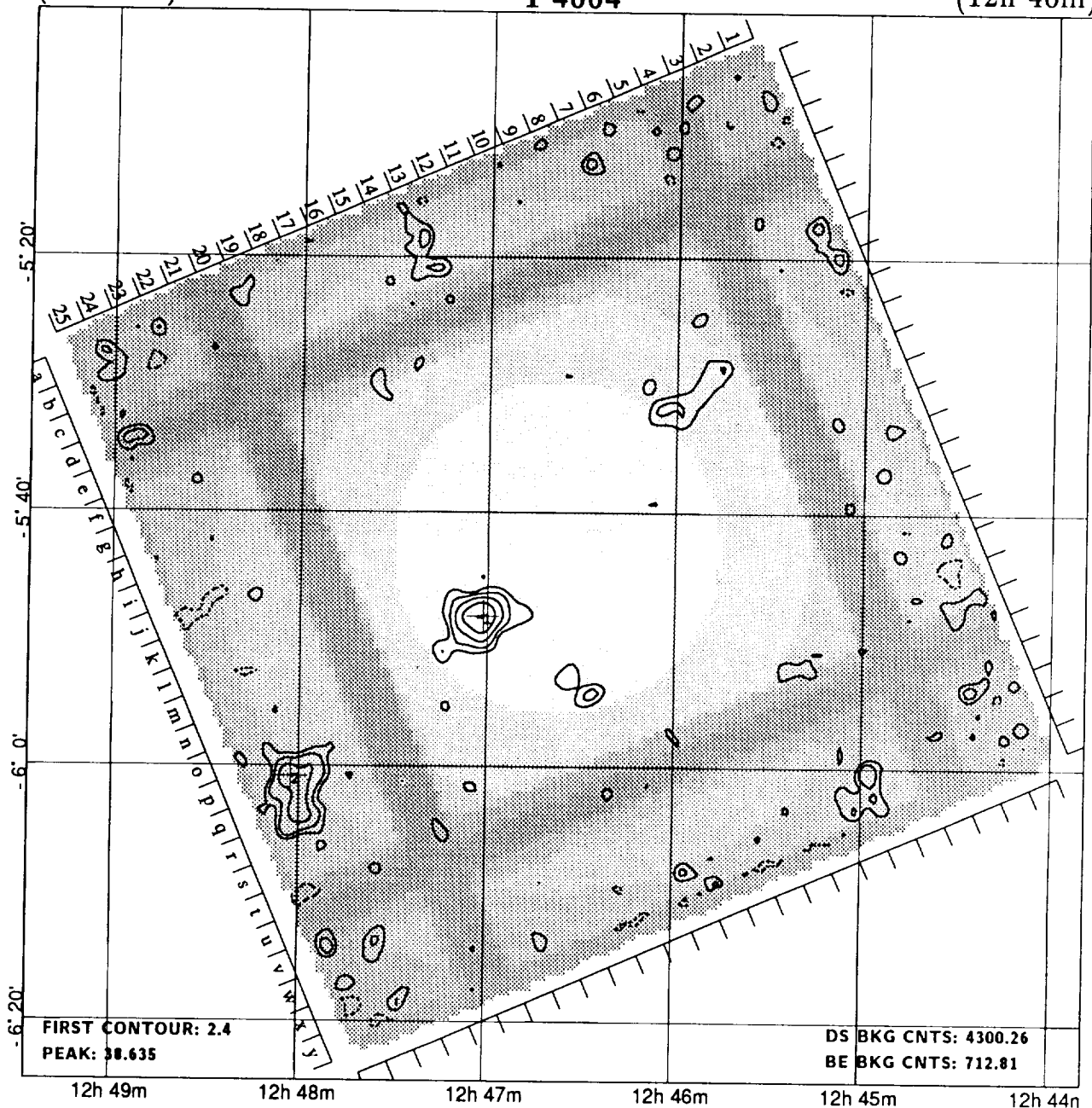
NH:  $1.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2865	1	12 46 30.2	60 35 31	31	0.1173	0.0059	413.7	19.3	19.9	1.6	0	0.4	H	S

(12h 46m)

I 4004

(12h 46m)



## QUASAR Q 1246-057

FIELD CENTER:  $12^h 46^m 38.0^s$   $-05^\circ 42' 43''$  (B1950)  
 $12^h 49^m 13.1^s$   $-05^\circ 59' 04''$  (J2000)  
 $l: 301.92$   $b: 56.88$

DATE: 1979/201 - 1979/202  
 LIVETIME: 3484.6s  
 ROLL ANGLE:  $66.8^\circ$

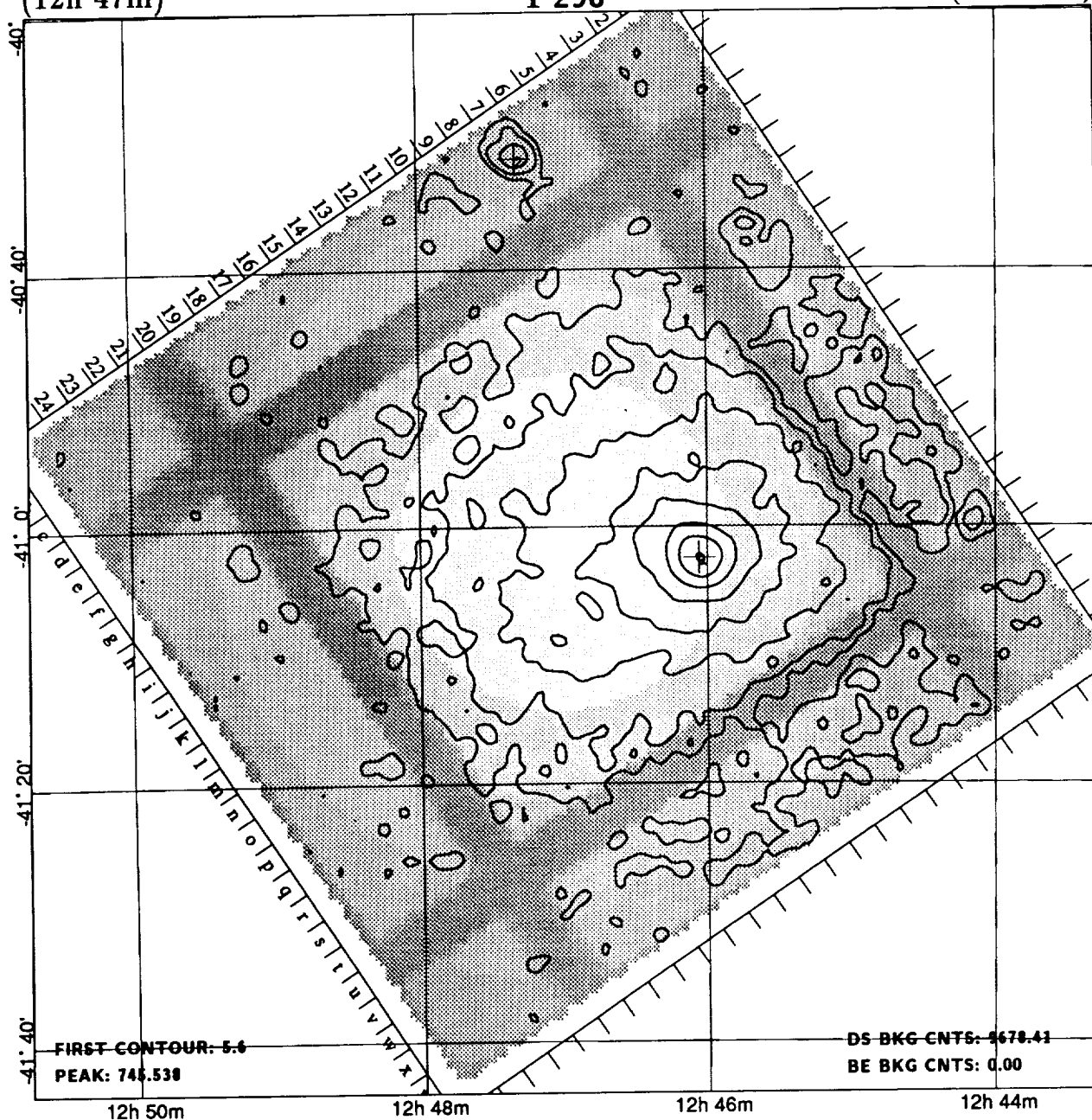
NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2867	1	12 47 01.4	-05 48 06	38	0.0608	0.0052	146.1	11.9	11.6	1.5	0	8.1	AH	S
2870	2	12 48 02.6	-06 00 49	51	0.0248	0.0048	33.2	8.8	5.1	2.7	0	27.8	H	

(12h 47m)

I 298

(12h 47m)



## CENTAURUS DETAILED CLUSTER STUDY

FIELD CENTER:  $12^{\text{h}}47^{\text{m}}00.0^{\text{s}}$   $-41^{\circ}01'59''$  (B1950)  
 $12^{\text{h}}49^{\text{m}}46.0^{\text{s}}$   $-41^{\circ}18'19''$  (J2000)  
 $\ell$ : 302.59  $b$ : 21.57

DATE: 1979/214 - 1979/215  
 LIVETIME: 7842.7s  
 ROLL ANGLE:  $56.2^{\circ}$

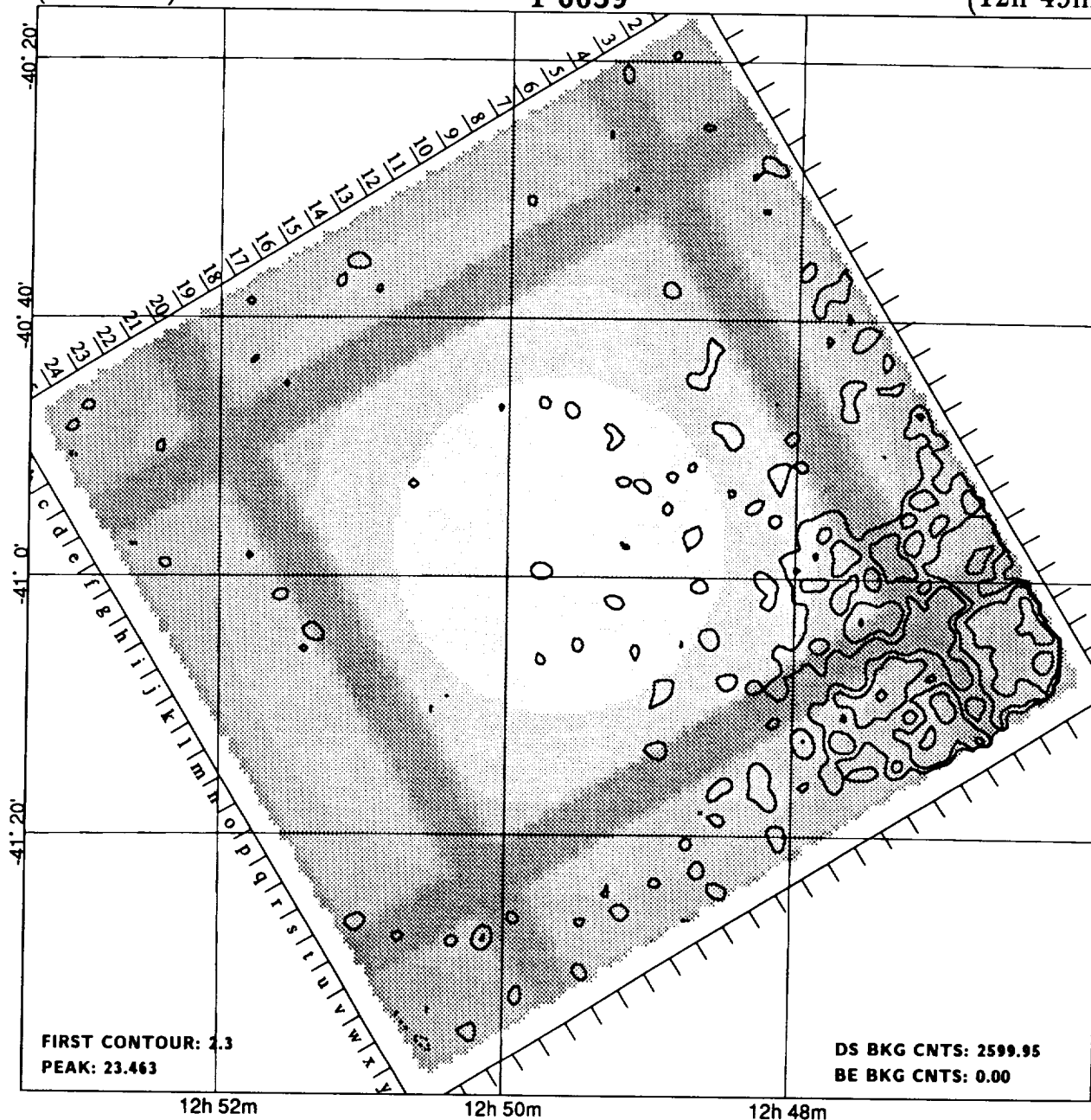
NH:  $7.8\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
2862	1L	12 46 03.5	-41 02 23	37	0.362	0.013	1869.5	1384.5	26.9	8.4	0	10.7	A
2868	2L	12 47 19.1	-40 31 21	54	0.0194	0.0041	52.9	32.1	4.7	1.4	0	30.9	

(12h 49m)

I 6059

(12h 49m)



FIELD CENTER:  $12^{\text{h}}49^{\text{m}}37.0^{\text{s}}$   $-40^{\circ}58'18''$  (B1950)  
 $12^{\text{h}}52^{\text{m}}23.6^{\text{s}}$   $-41^{\circ}14'36''$  (J2000)  
 $l: 303.13$   $b: 21.63$

DATE: 1980/206 - 1980/210  
 LIVETIME: 2106.8s  
 ROLL ANGLE:  $58.6^{\circ}$

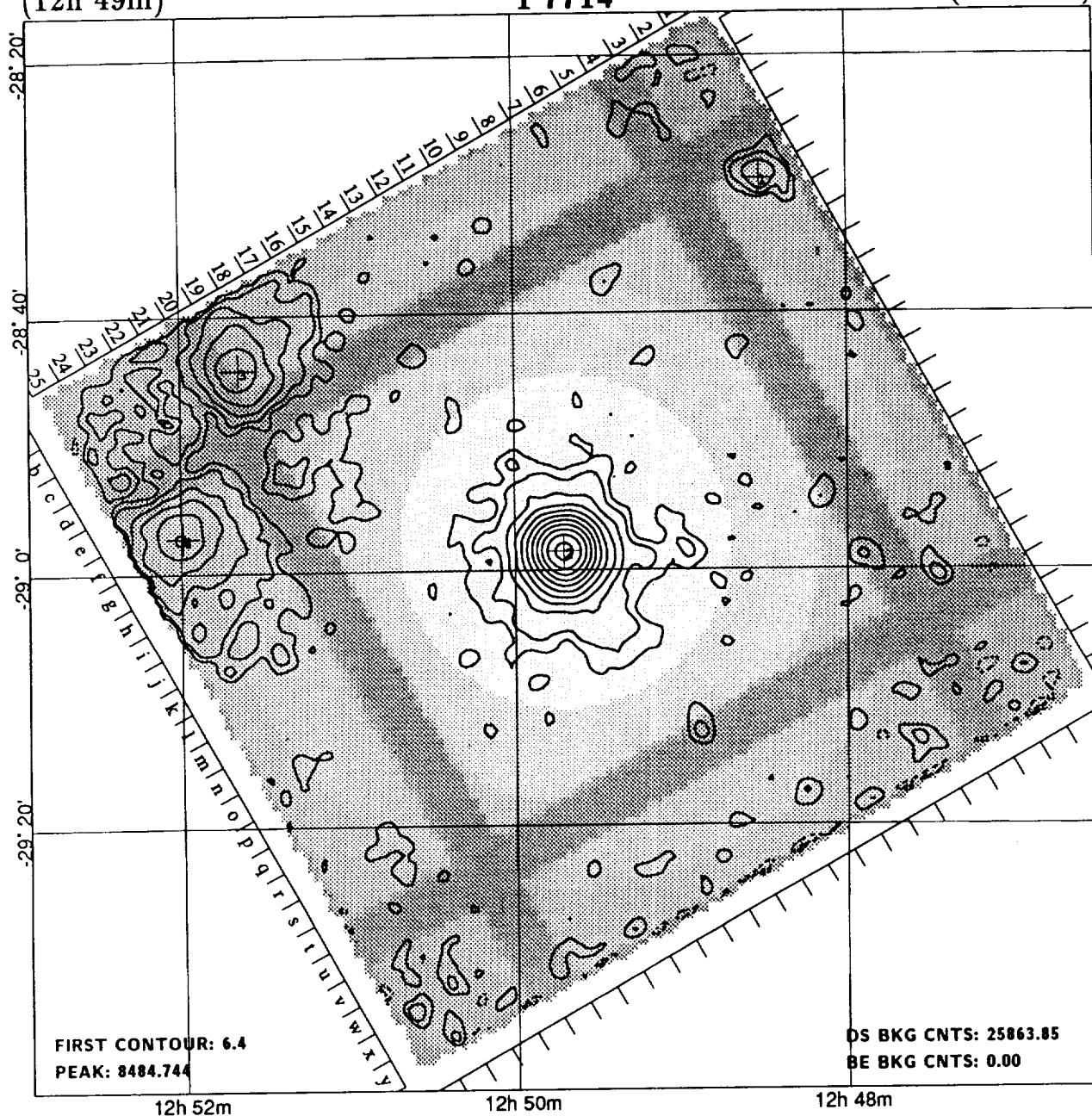
NH:  $7.8\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS: LS



(12h 49m)

I 7714

(12h 49m)



## EX HYA, AM HERCULIS TYPE OBJECT

FIELD CENTER:  $12^h 49^m 42.4^s$   $-28^\circ 58' 39''$  (B1950)  
 $12^h 52^m 24.4^s$   $-29^\circ 14' 57''$  (J2000)  
 $l: 303.19$   $b: 33.62$

DATE: 1980/210 - 1980/210  
 LIVETIME: 20958.4s  
 ROLL ANGLE:  $60.7^\circ$

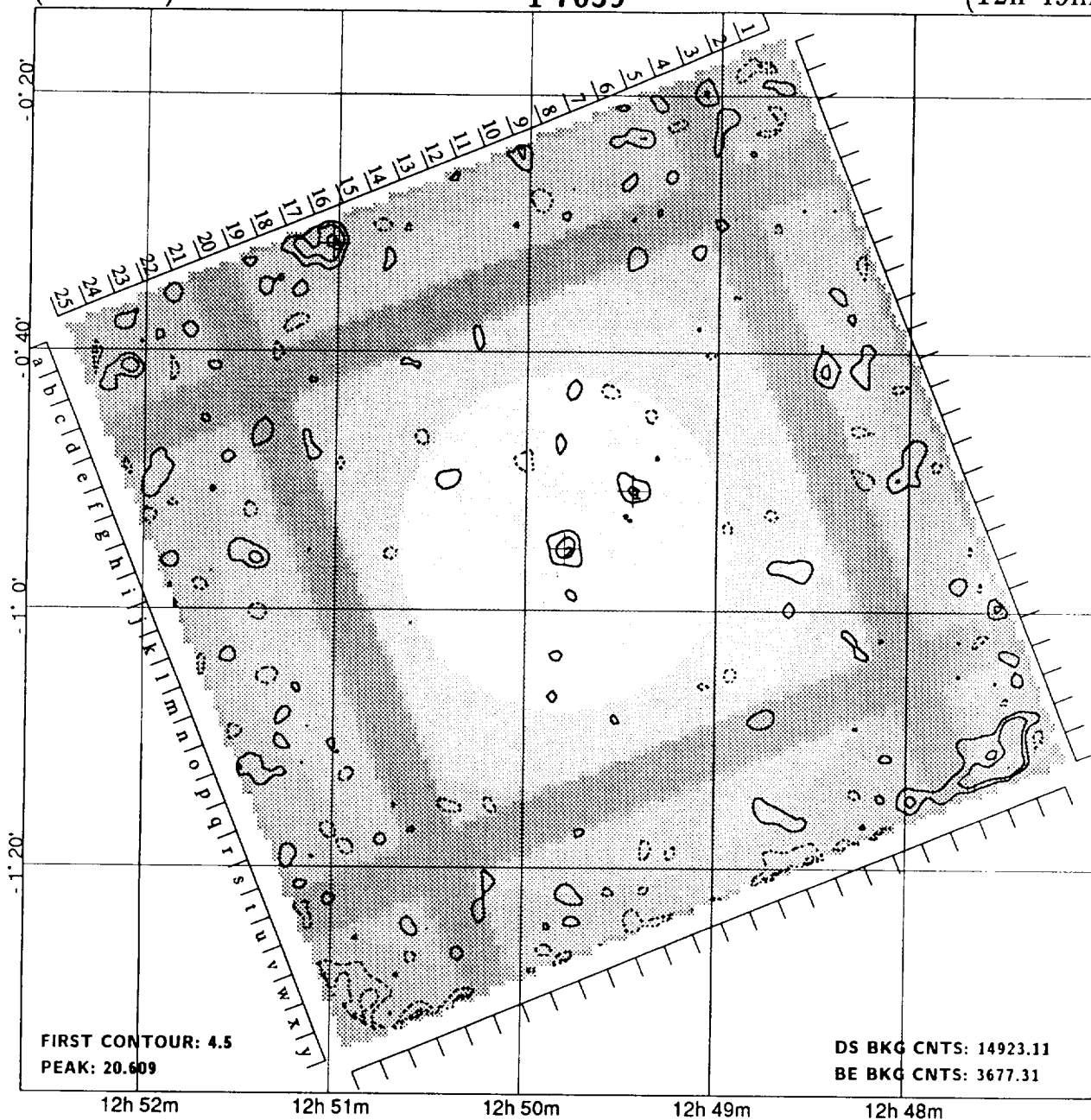
NH:  $6.2E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2871	1L	12 48 31.2	-28 29 32	50	*0.0109	0.0021	81.0	49.5	5.3	1.4	401	33.0	I	
2876	2L	12 49 42.3	-28 58 32	31	2.127	0.014	33203.5	3795.4	152.5	1.3	0	0.1	A	CV
2885	3L	12 51 39.1	-28 44 12	47	*0.0407	0.0053	310.4	258.4	7.6	8.2	803	29.3		
2886	4L	12 51 59.5	-28 57 15	47	0.0328	0.0040	238.6	294.4	8.2	7.8	0	30.0		

(12h 49m)

I 7039

(12h 49m)



## NGC 4753, EARLY GALAXY SURVEY

FIELD CENTER:  $12^{\text{h}}49^{\text{m}}48.7^{\text{s}}$   $-00^{\circ}55'39''$  (B1950)  
 $12^{\text{h}}52^{\text{m}}22.7^{\text{s}}$   $-01^{\circ}11'57''$  (J2000)  
 $l: 303.43$   $b: 61.67$

DATE: 1980/198 - 1980/198

NH:  $1.6\text{E}+20$ 

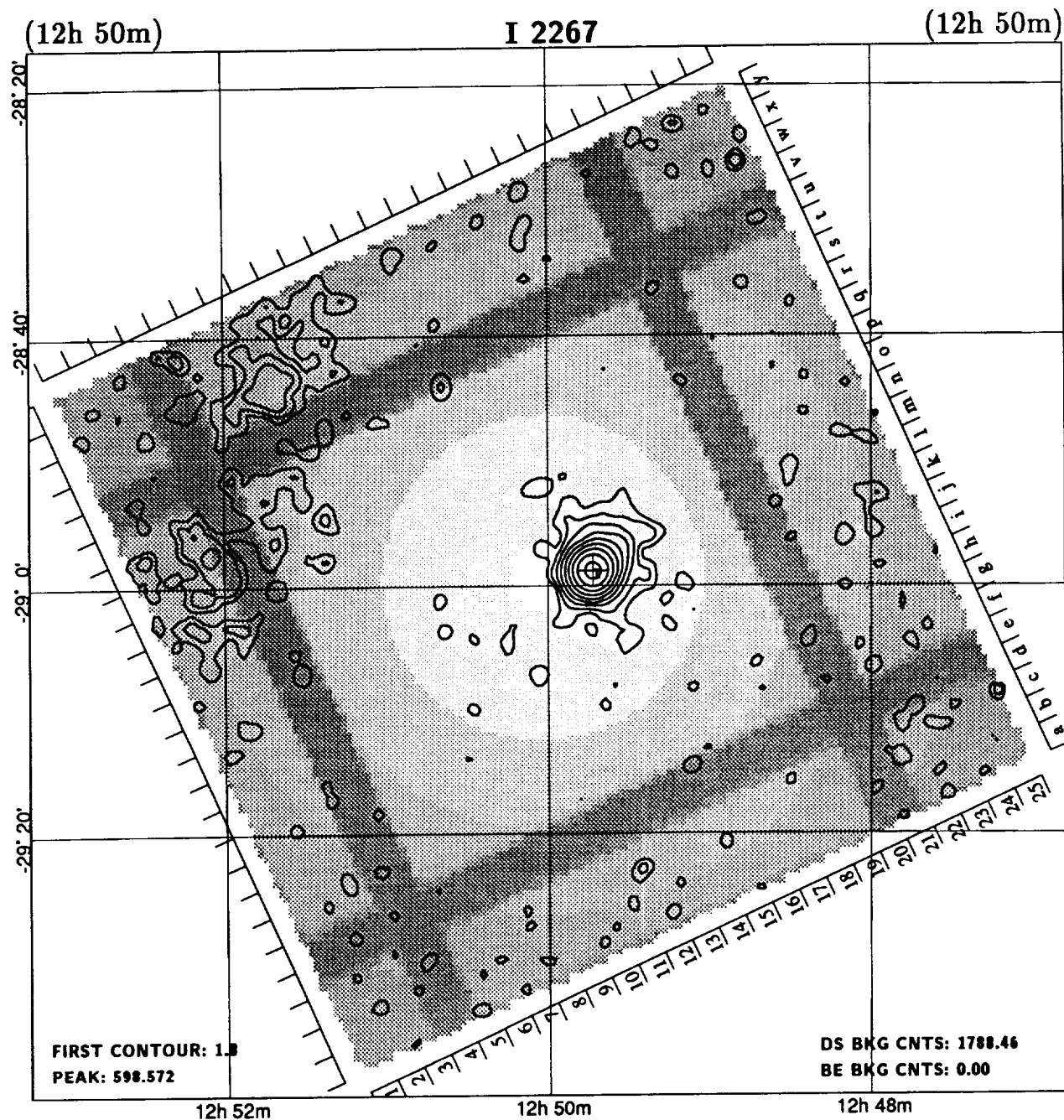
LIVETIME: 12092.6s

REF/ID:

ROLL ANGLE:  $67.9^{\circ}$ 

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2875	1	12 49 26.4	-00 50 43	42	0.0042	0.0011	35.7	48.3	3.9	0.8	0	8.0		
2877	2	12 49 47.7	-00 55 16	35	0.0065	0.0011	58.5	46.5	5.7	0.8	0	0.4	H	G
2883	3	12 51 01.6	-00 31 39	52	0.0085	0.0018	36.3	24.7	4.6	1.4	500	30.5	H	



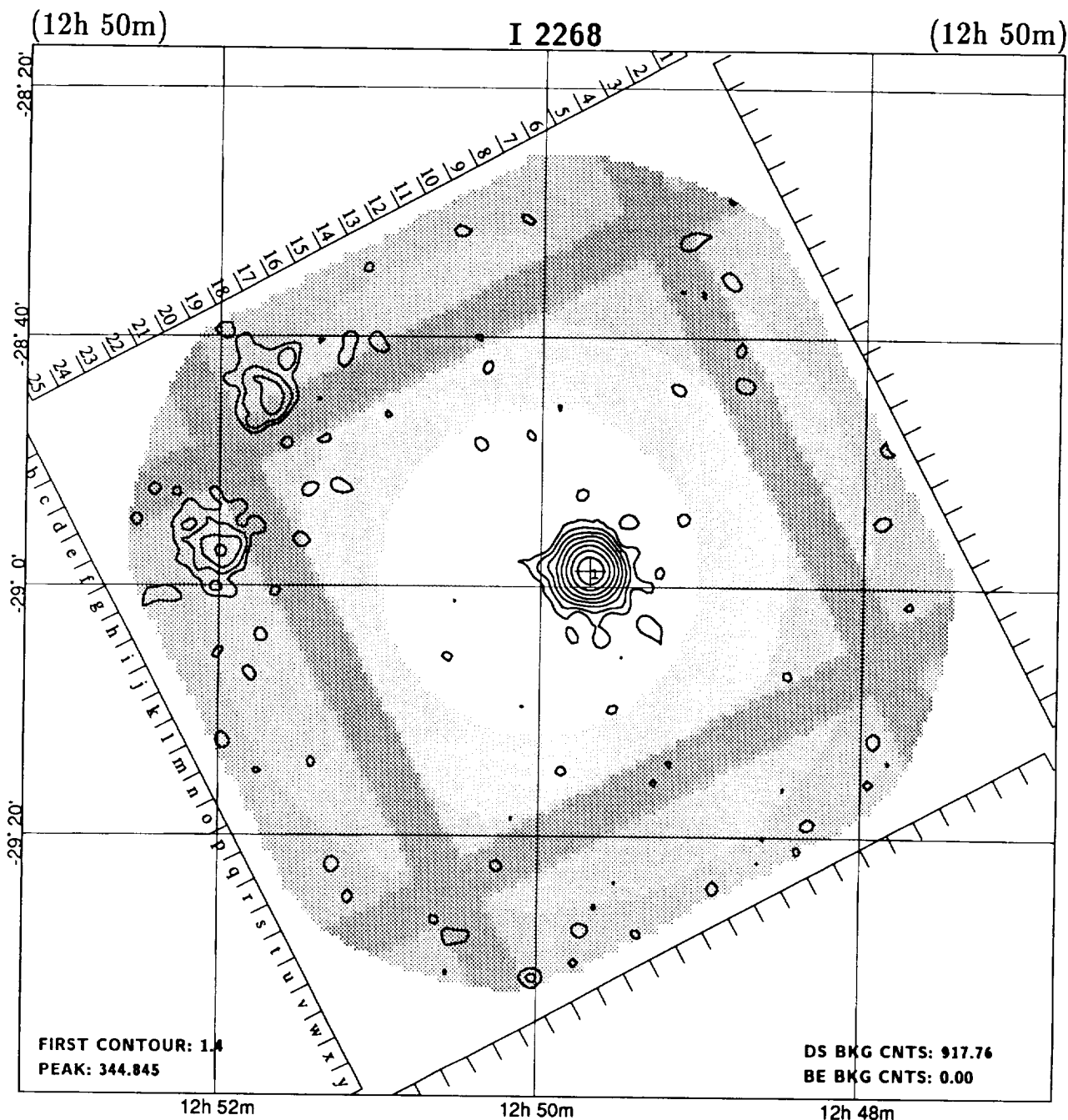
STELLAR SURVEY-CATAclysmic VARIABLES: EX HYA

FIELD CENTER:  $12^h 50^m 00.0^s$   $-28^\circ 58' 59''$  (B1950)  
 $12^h 52^m 42.0^s$   $-29^\circ 15' 17''$  (J2000)  
 $l: 303.26$   $b: 33.62$

DATE: 1979/ 13 - 1979/ 13  
 LIVETIME: 1449.3s  
 ROLL ANGLE:  $-114.5^\circ$

NH:  $6.2E+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2876	1L	12 49 43.3	-28 58 49	31	2.157	0.052	2257.1	138.9	41.1	1.2	0	3.7	A	CV



STELLAR SURVEY-CATAclysmic VARIABLES: EX HYA

FIELD CENTER:  $12^h 50^m 00.0^s$   $-28^\circ 58' 59''$  (B1950)  
 $12^h 52^m 42.0^s$   $-29^\circ 15' 17''$  (J2000)  
 $l: 303.26$   $b: 33.62$

DATE: 1980/206 - 1980/206  
 LIVETIME: 743.7s  
 ROLL ANGLE:  $62.0^\circ$

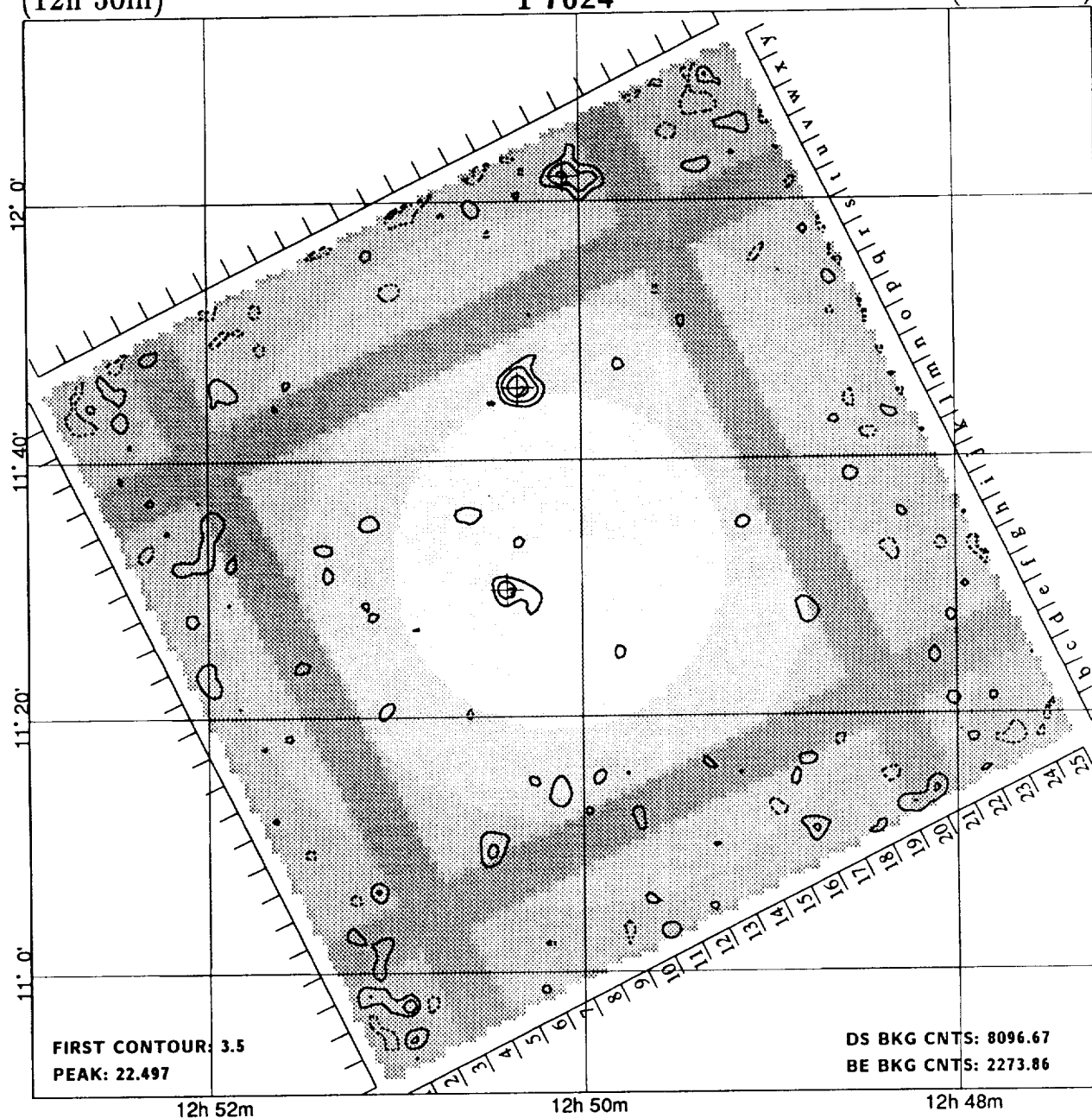
NH:  $6.2E+20$   
 REF/ID:  
 FIELD FLAGS: CLS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2876	1L	12 49 41.5	-28 58 41	31	2.456	0.081	1318.1	159.9	30.1	1.3	0	4.0	A	CV

(12h 50m)

I 7024

(12h 50m)



## NGC 4754/4762, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 50^m 06.0^s$   $11^\circ 32' 35''$  (B1950)  
 $12^h 52^m 36.7^s$   $11^\circ 16' 18''$  (J2000)  
 $l: 303.99$   $b: 74.14$

DATE: 1979/353 - 1979/353  
 LIVETIME: 6561.0s  
 ROLL ANGLE:  $-116.4^\circ$

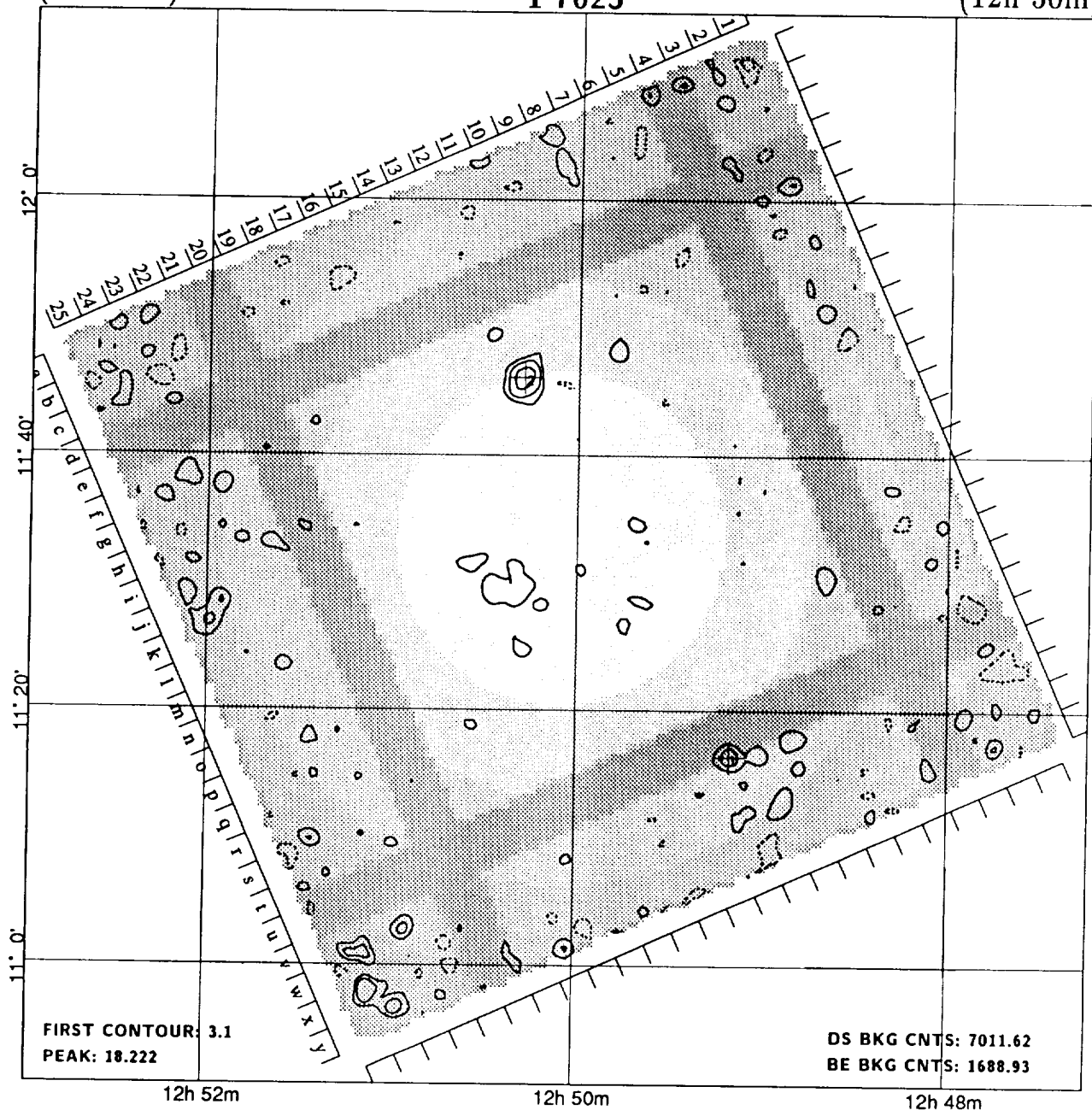
NH:  $2.2E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2878	1	12 50 05.3	12 01 57	54	0.0100	0.0028	22.8	19.2	3.5	1.3	0	29.2	H	
2881	2	12 50 20.4	11 45 36	41	0.0172	0.0024	68.5	21.5	7.2	1.0	0	13.7	AH	
2882	3	12 50 24.1	11 29 49	42	0.0067	0.0016	31.7	27.3	4.1	0.9	0	5.3	H	

(12h 50m)

I 7025

(12h 50m)



## NGC 4754/4762, VIRGO CLUSTER GALAXY SURVEY

FIELD CENTER:  $12^h 50^m 06.0^s$   $11^\circ 32' 35''$  (B1950)  
 $12^h 52^m 36.7^s$   $11^\circ 16' 18''$  (J2000)  
 $l: 303.99$   $b: 74.14$

DATE: 1980/179 - 1980/179

NH: 2.2E+20

LIVETIME: 5681.7s

REF/ID:

ROLL ANGLE: 66.0°

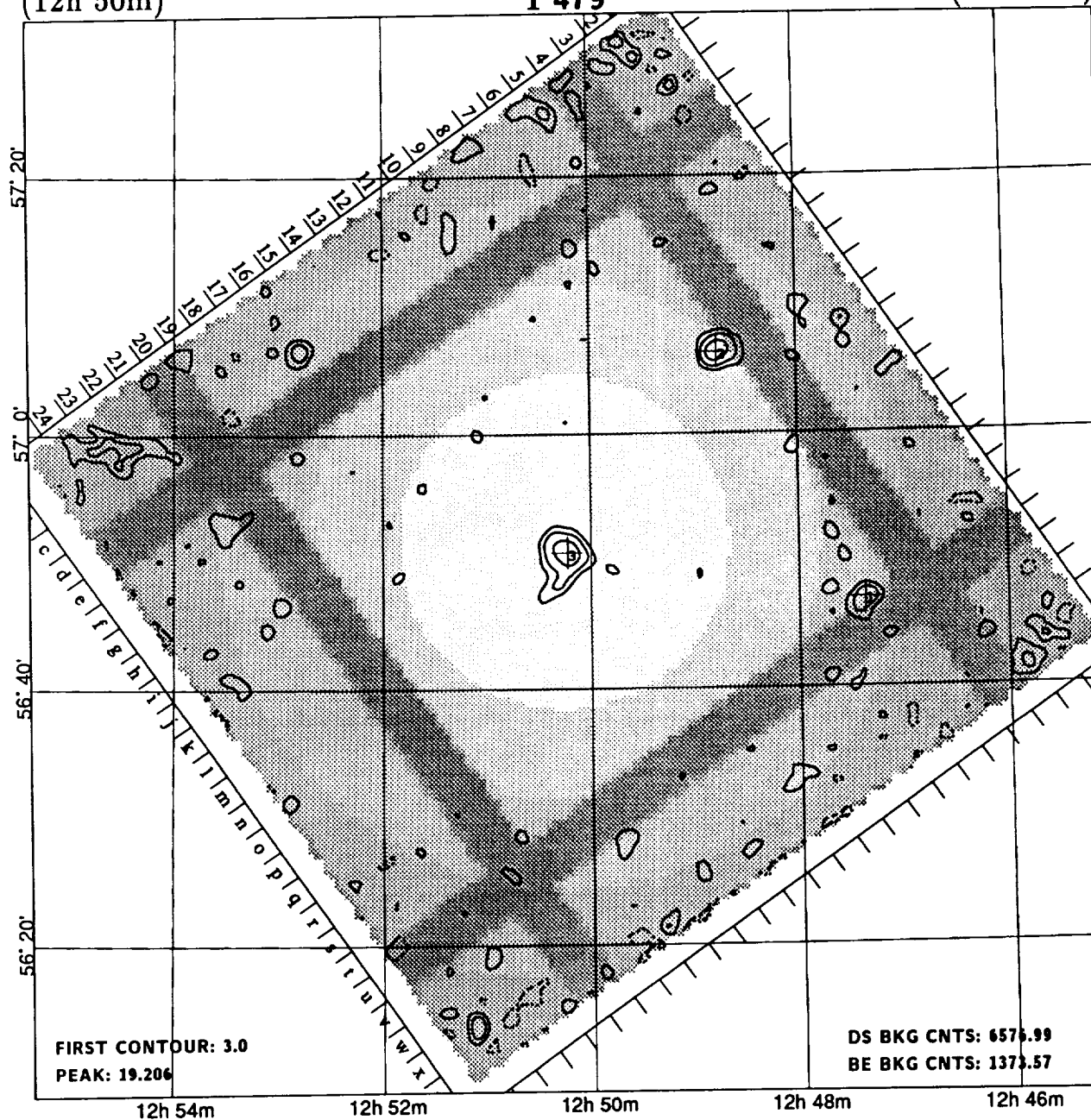
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2873	1	12 49 10.0	11 16 20	56	*0.0071	0.0020	19.4	9.6	3.6	0.9	907	21.2	H	
2881	2	12 50 17.7	11 46 03	41	0.0173	0.0025	61.1	18.9	6.8	1.0	0	13.8	AH	

(12h 50m)

I 479

(12h 50m)



## 3CR 277.1 (QSO 1250+560) QUASAR SURVEY

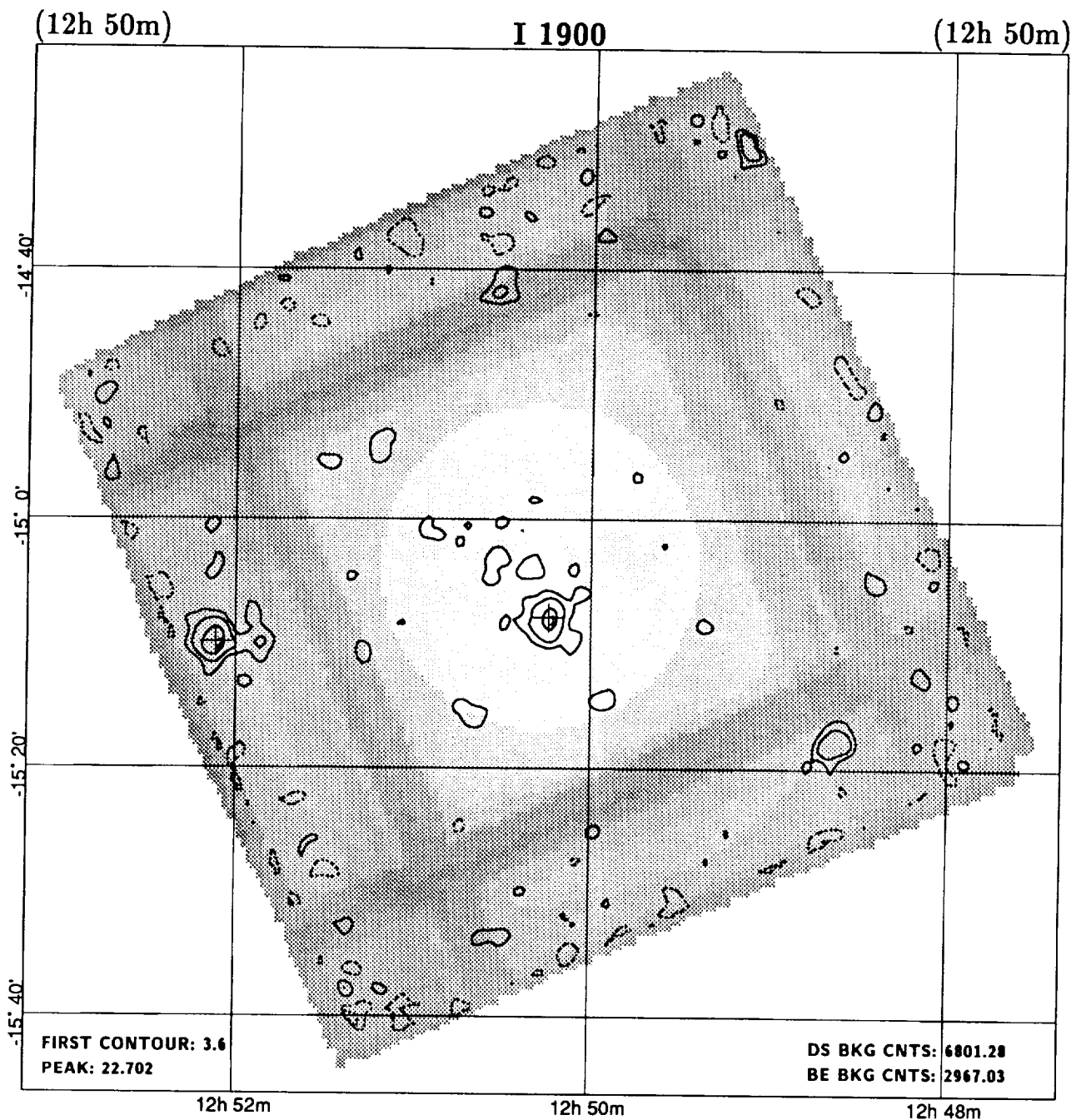
FIELD CENTER:  $12^h 50^m 15.3^s$   $56^\circ 50' 36''$  (B1950)  
 $12^h 52^m 26.4^s$   $56^\circ 34' 19''$  (J2000)  
 $l: 122.65$   $b: 60.56$

DATE: 1980/158 - 1980/158  
 LIVETIME: 5329.5s  
 ROLL ANGLE:  $54.9^\circ$

NH:  $1.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2869	1	12 47 22.1	56 47 01	55	*0.0088	0.0024	20.9	12.1	3.6	0.8	806	23.7	H	
2872	2	12 48 46.1	57 06 14	50	*0.0186	0.0028	52.2	10.8	6.6	0.9	401	19.6	H	
2879	3	12 50 13.5	56 50 40	32	0.0217	0.0026	86.2	19.8	8.4	1.4	0	0.4	H	Q





**X-RAY STUDY OF RADIO GALAXIES: NGC4756**

FIELD CENTER:  $12^h 50^m 16.2^s$   $-15^\circ 04' 17''$  (B1950)  
 $12^h 52^m 54.0^s$   $-15^\circ 20' 34''$  (J2000)  
 $l: 303.45$   $b: 47.53$

DATE: 1979/ 8 - 1980/204  
 LIVETIME: 5511.3s

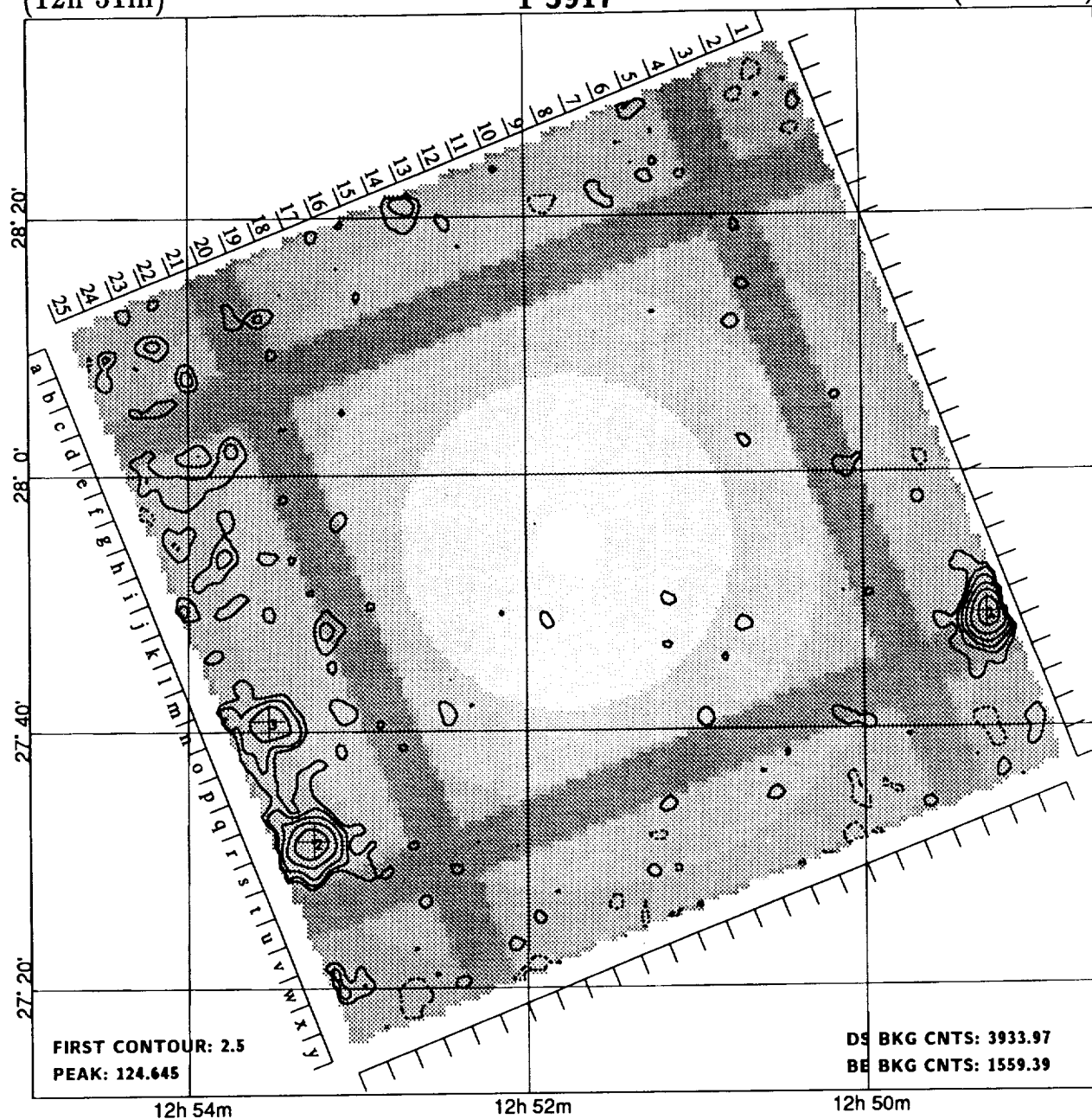
NH:  $3.5E+20$   
 REF/ID: !  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2880	1L	12 50 14.3	-15 07 58	35	0.0128	0.0032	51.0	53.0	4.0	1.4	0	3.8		CLG
2888	2L	12 52 06.6	-15 09 58	51	0.0216	0.0046	47.4	24.6	4.6	1.6	0	27.3		

(12h 51m)

I 3917

(12h 51m)

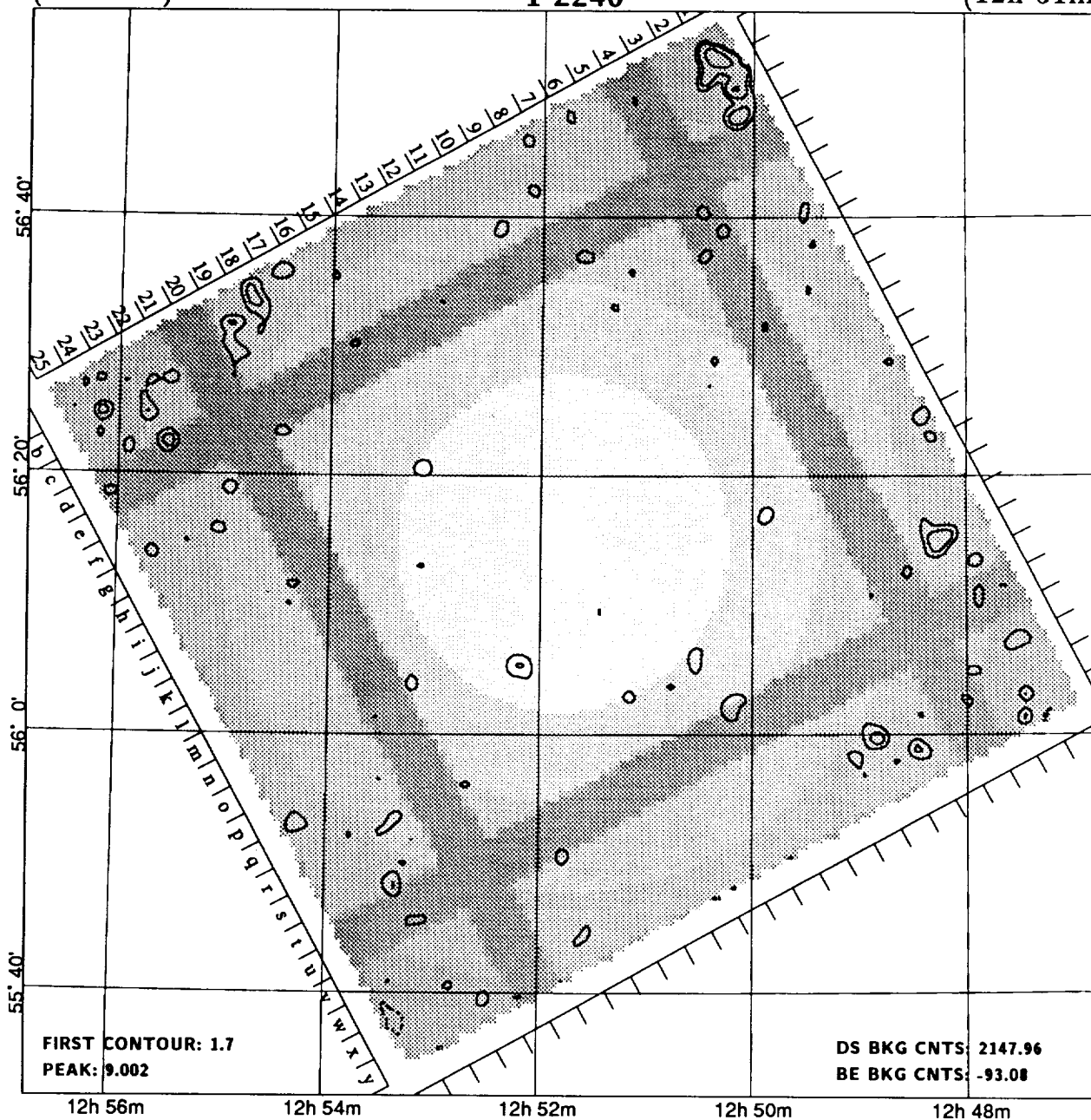


CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2874	1	12 49 16.4	27 48 59	47	*0.237	0.016	218.3	6.7	14.6	1.3	1106	33.5	H	
2896	2	12 53 15.8	27 31 29	48	0.150	0.012	163.3	8.7	12.5	2.1	0	29.8	H	
2899	3	12 53 31.7	27 40 49	50	0.0408	0.0062	51.2	9.8	6.6	9.0	0	26.0	H	

(12h 51m)

I 2240

(12h 51m)



STELLAR SURVEY-EARLY TYPE STARS: HD112185=EPSILON UMA

FIELD CENTER:  $12^{\text{h}}51^{\text{m}}48.0^{\text{s}}$   $56^{\circ}13'59''$  (B1950)  
 $12^{\text{h}}53^{\text{m}}59.0^{\text{s}}$   $55^{\circ}57'44''$  (J2000)  
 $l$ : 122.19  $b$ : 61.16

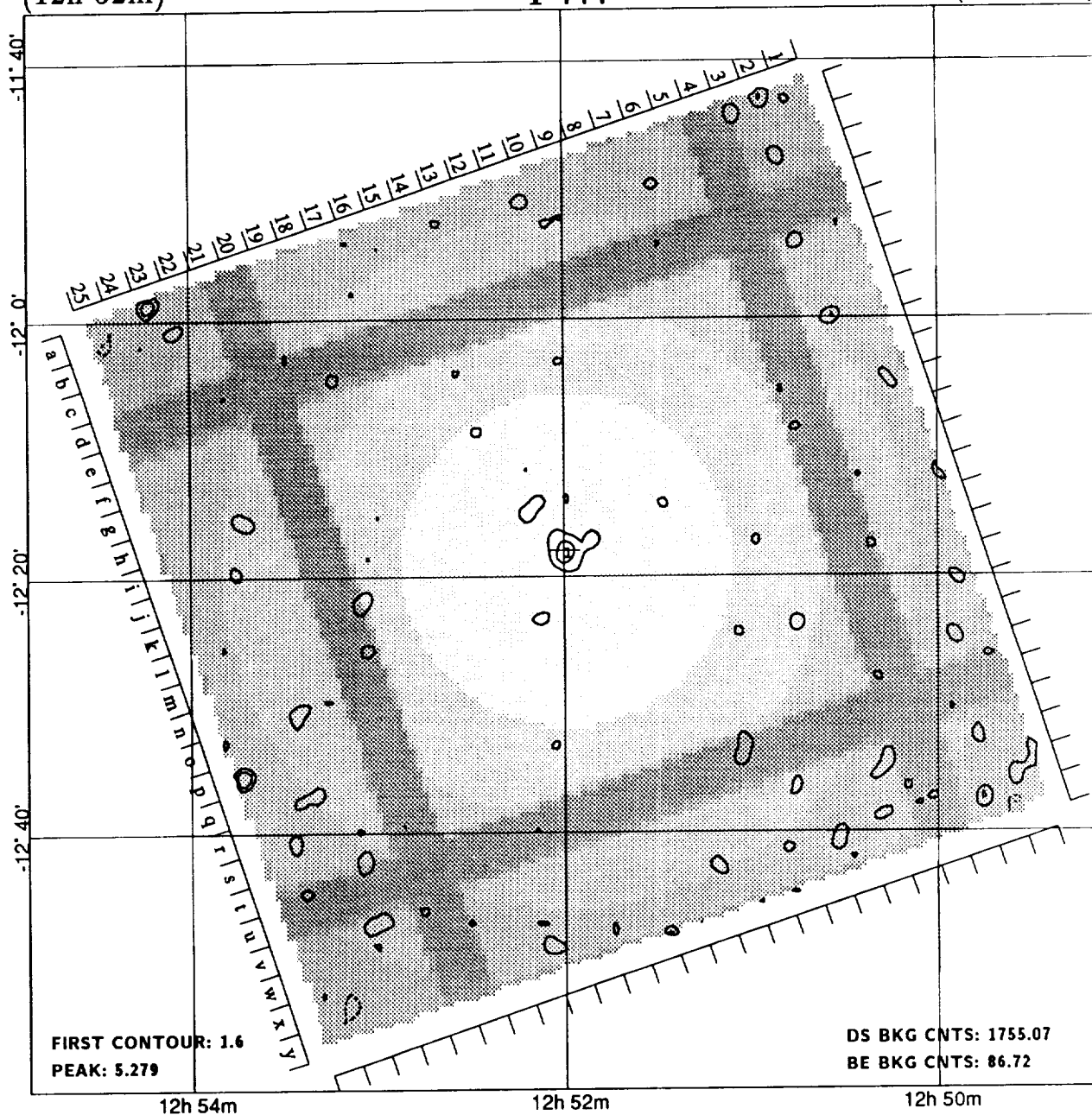
DATE: 1979/166 - 1979/166  
 LIVETIME: 1740.5s  
 ROLL ANGLE: 61.3°

NH: 1.3E+20  
 REF/ID:  
 FIELD FLAGS:

(12h 52m)

I 444

(12h 52m)



## NGC 4782/83 ABNORMAL GALAXIES SURVEY

FIELD CENTER:  $12^{\text{h}}52^{\text{m}}00.0^{\text{s}}$   $-12^{\circ}17'59''$  (B1950)  
 $12^{\text{h}}54^{\text{m}}37.1^{\text{s}}$   $-12^{\circ}34'15''$  (J2000)  
 $l: 304.15$   $b: 50.29$

DATE: 1979/178 - 1979/178  
 LIVETIME: 1422.2s  
 ROLL ANGLE:  $71.6^{\circ}$

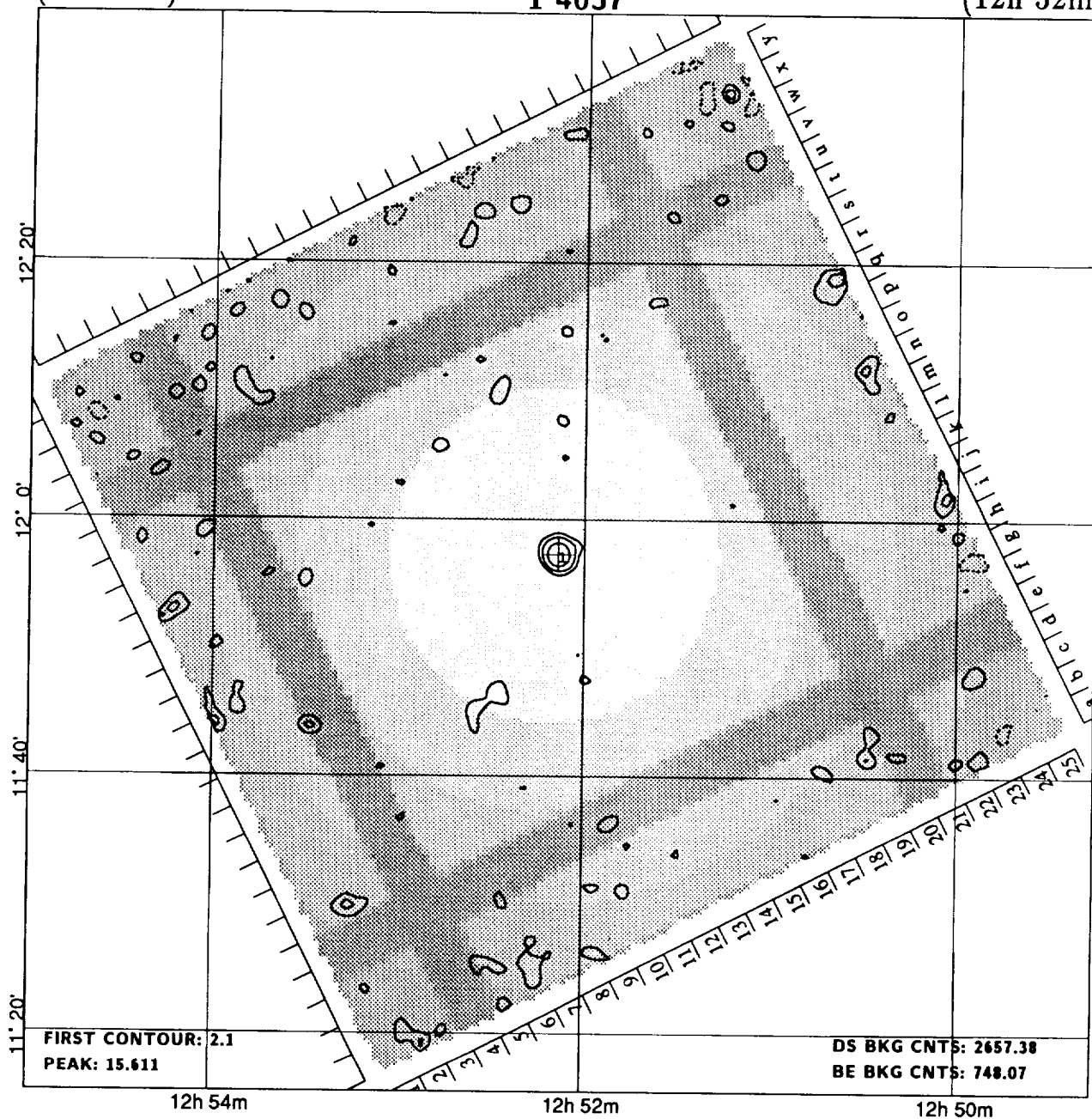
NH:  $3.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2887	1	12 52 00.1	-12 17 58	39	0.0170	0.0045	18.0	5.0	3.8	1.1	0	0.2	H	

(12h 52m)

I 4037

(12h 52m)



FIELD CENTER:  $12^h 52^m 07.7^s$   $11^\circ 57' 20''$  (B1950)  
 $12^h 54^m 38.2^s$   $11^\circ 41' 05''$  (J2000)  
 $l: 305.87$   $b: 74.54$

DATE: 1979/352 - 1979/352

NH:  $2.3E+20$ 

LIVETIME: 2153.4s

REF/ID:

ROLL ANGLE:  $-116.9^\circ$ 

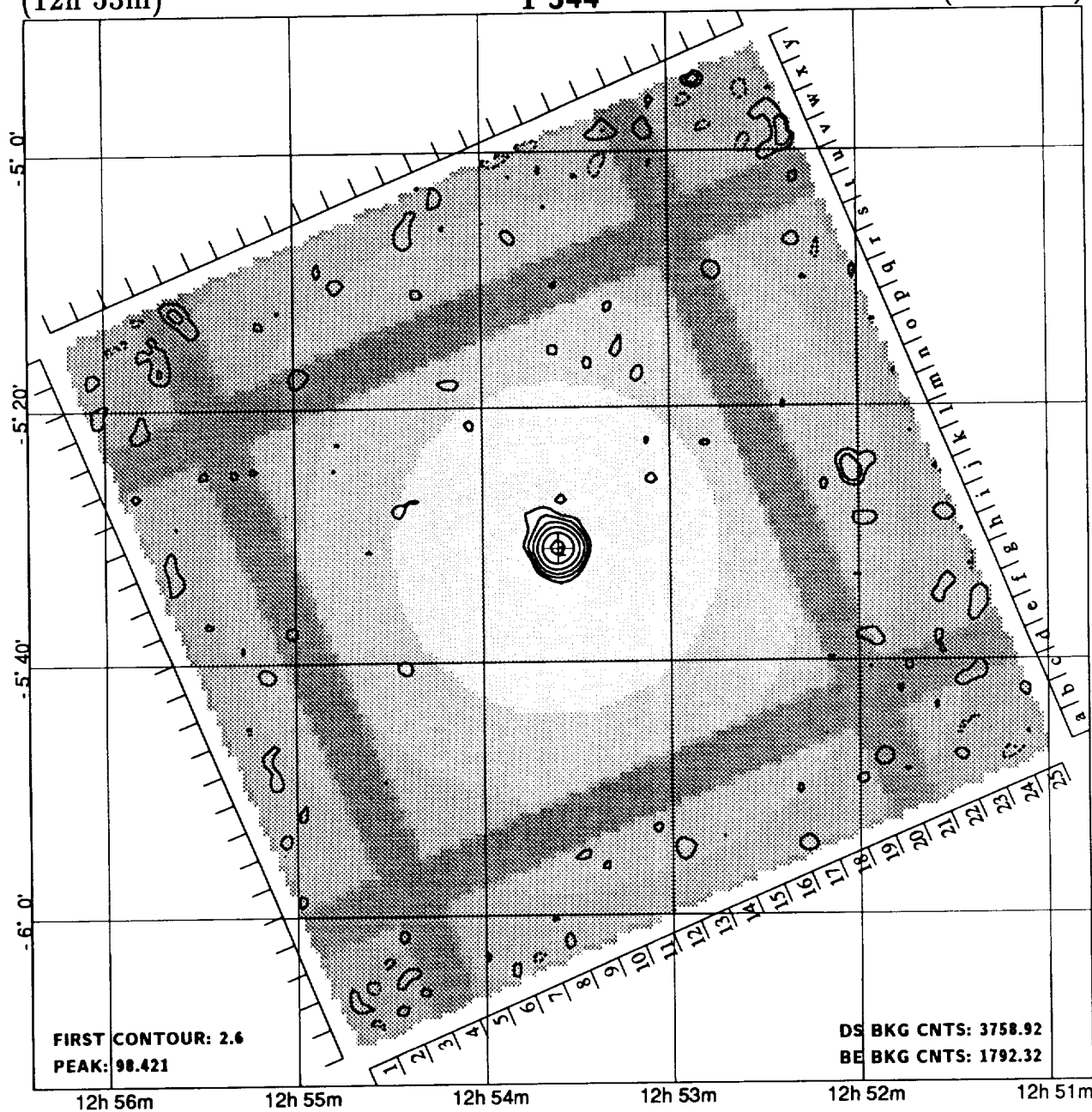
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2889	1	12 52 08.5	11 57 17	35	0.0345	0.0050	55.4	8.6	6.9	0.9	0	0.4	H	Q

(12h 53m)

I 544

(12h 53m)



## 3C 279 (QSO 1253-055) QUASAR SURVEY

FIELD CENTER:  $12^h 53^m 35.8^s$   $-05^\circ 31' 07''$  (B1950)  
 $12^h 56^m 11.1^s$   $-05^\circ 47' 21''$  (J2000)  
 $l: 305.10$   $b: 57.06$

DATE: 1979/ 7 - 1979/ 7  
 LIVETIME: 3046.0s  
 ROLL ANGLE:  $-113.0^\circ$

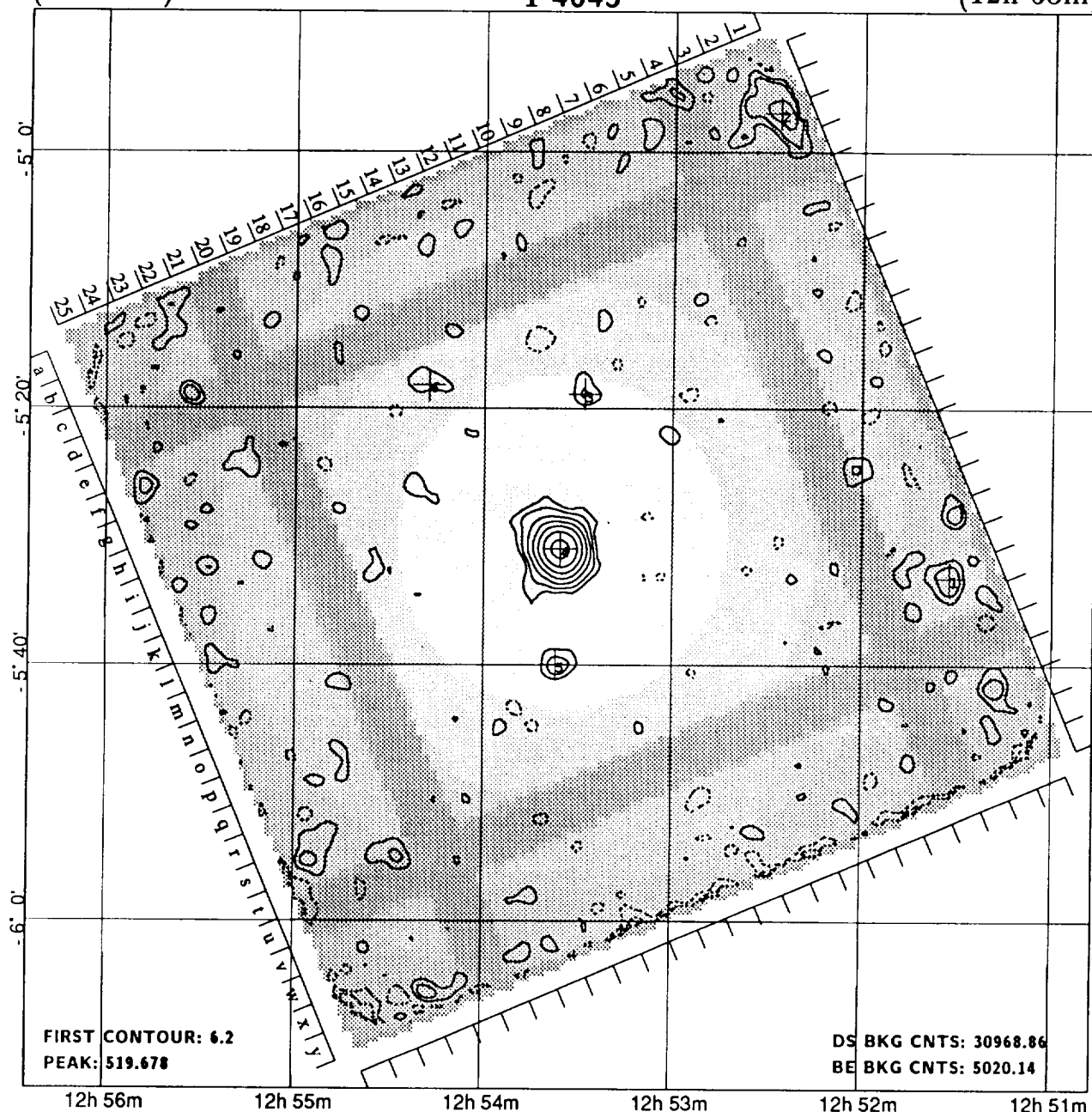
NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2900	1L	12 53 36.0	-05 31 05	31	0.182	0.010	414.7	34.3	17.3	1.2	0	0.1	A	Q

(12h 53m)

I 4645

(12h 53m)



QSO 3C 279

FIELD CENTER:  $12^h 53^m 35.8^s$   $-05^\circ 31' 07''$  (B1950)  
 $12^h 56^m 11.1^s$   $-05^\circ 47' 21''$  (J2000)  
 $l: 305.10$   $b: 57.06$

DATE: 1980/196 - 1980/204  
 LIVETIME: 25094.9s  
 ROLL ANGLE:  $67.2^\circ$

NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS: C

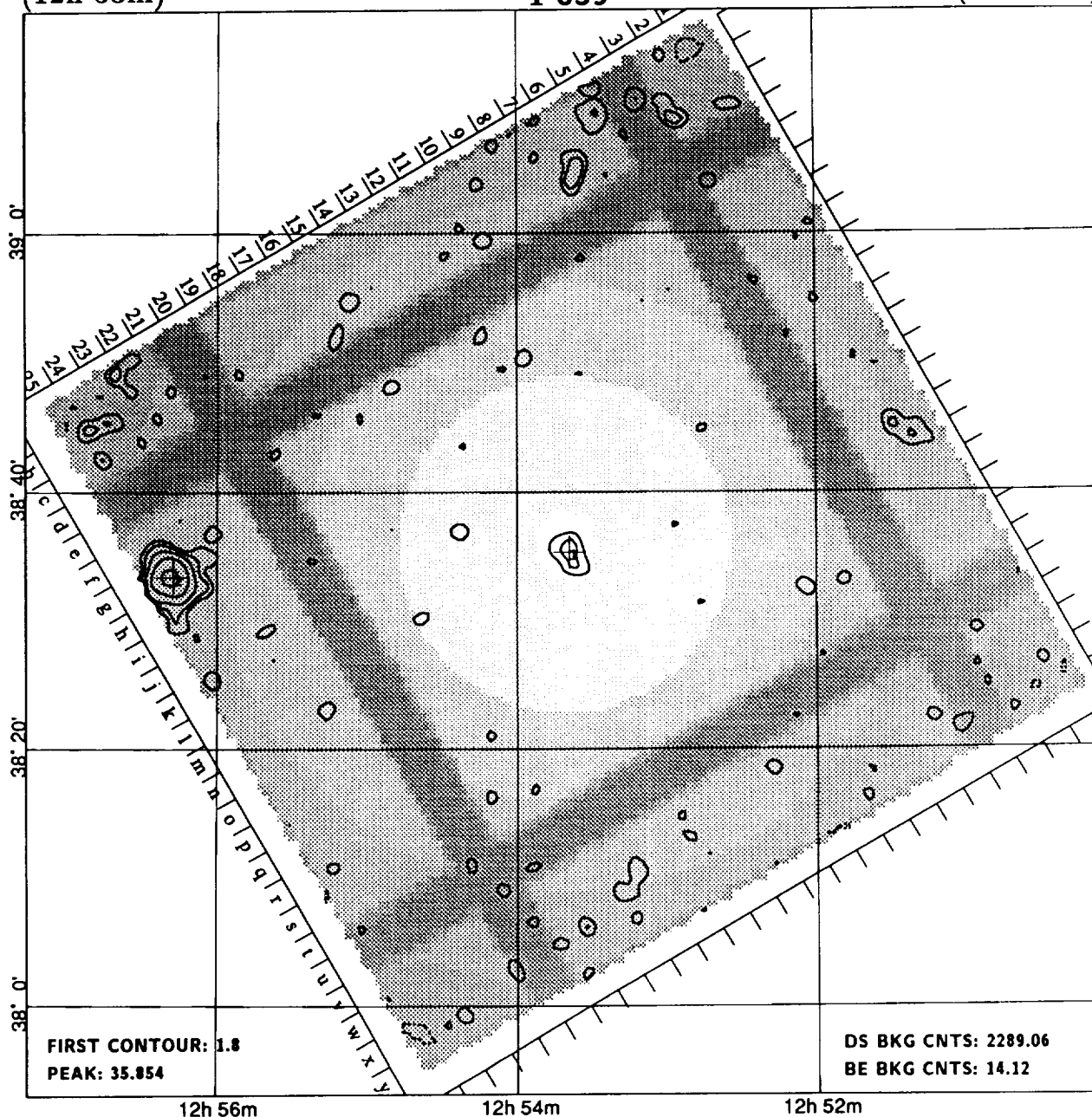
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2884	1	12 51 32.4	-05 33 13	59	0.0049	0.0012	42.4	59.6	4.2	1.0	0	30.9	H	
2890	2	12 52 26.5	-04 56 58	59	0.0091	0.0018	52.3	49.7	5.2	1.9	700	38.2	H	
2898	3	12 53 28.1	-05 18 52	43	0.00236	0.00067	38.3	79.7	3.5	0.6	0	12.5	H	
2900	4	12 53 35.6	-05 31 00	31	0.1217	0.0026	2274.2	92.8	46.7	1.3	0	0.2	AH	Q
2901	5	12 53 36.9	-05 39 57	41	0.00376	0.00070	63.2	73.8	5.4	0.8	0	8.7		AGN
2906	6	12 54 17.7	-05 18 10	63	0.00265	0.00072	38.0	69.0	3.7	0.7	0	16.7	H	



(12h 53m)

I 839

(12h 53m)



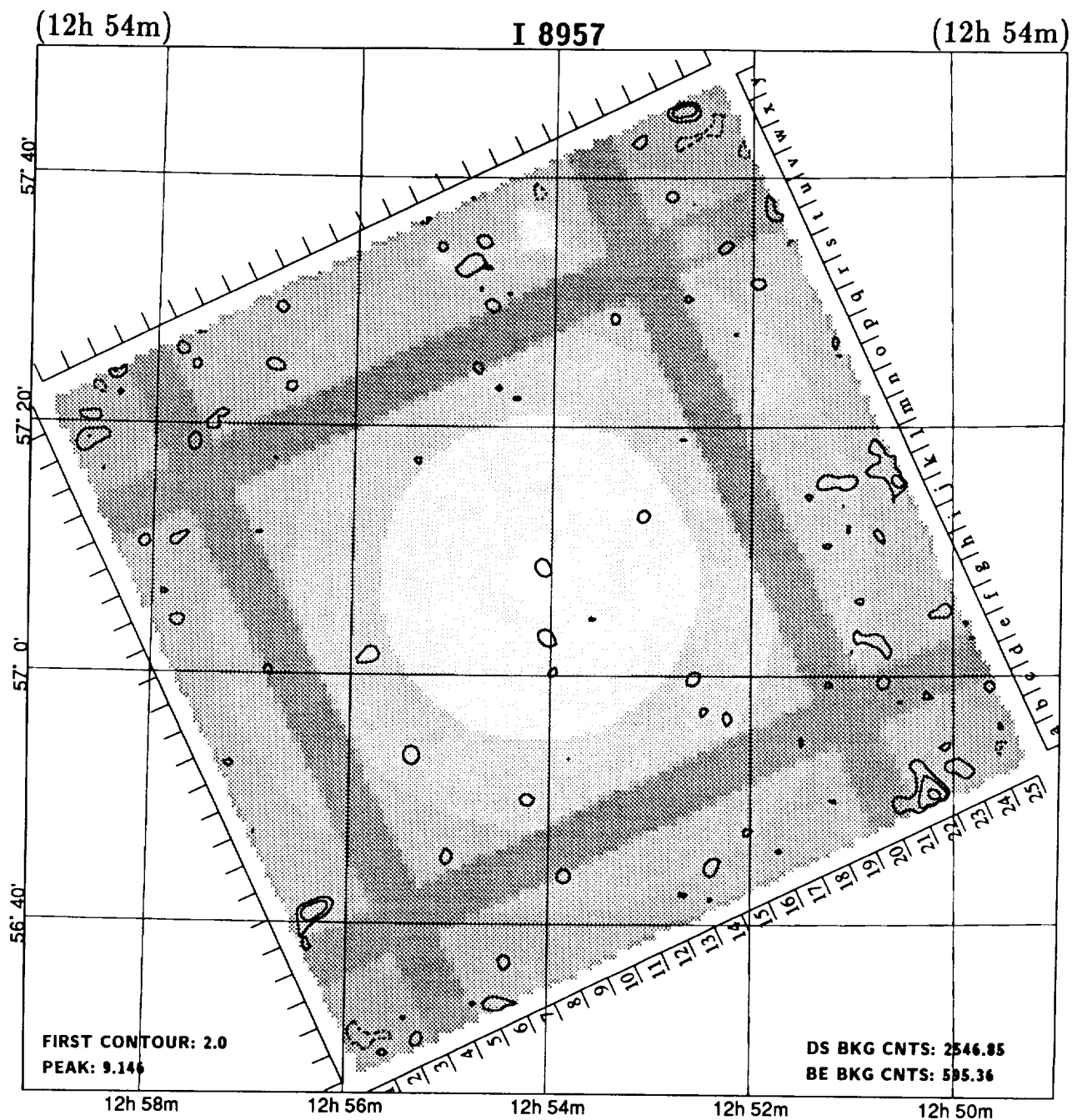
## HD112413 STELLAR OBSERVATIONS, A STARS

FIELD CENTER:  $12^{\text{h}}53^{\text{m}}41.5^{\text{s}}$   $38^{\circ}35'16''$  (B1950)  
 $12^{\text{h}}56^{\text{m}}02.6^{\text{s}}$   $38^{\circ}19'03''$  (J2000)  
 $l: 118.29$   $b: 78.77$

DATE: 1979/167 - 1979/167  
 LIVETIME: 1854.9s  
 ROLL ANGLE:  $60.0^{\circ}$

NH:  $1.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2902	1	12 53 39.0	38 35 17	39	0.0156	0.0038	21.6	5.4	4.2	0.9	0	0.4	H	S
2927	2	12 56 17.4	38 33 24	50	0.105	0.013	65.6	3.4	7.9	1.5	100	30.6	H	S



SEYFERT GALAXY SURVEY: MKN 231

FIELD CENTER:  $12^h 54^m 04.8^s$   $57^\circ 08' 23''$  (B1950)  
 $12^h 56^m 14.0^s$   $56^\circ 52' 10''$  (J2000)  
 $l$ : 121.61  $b$ : 60.25

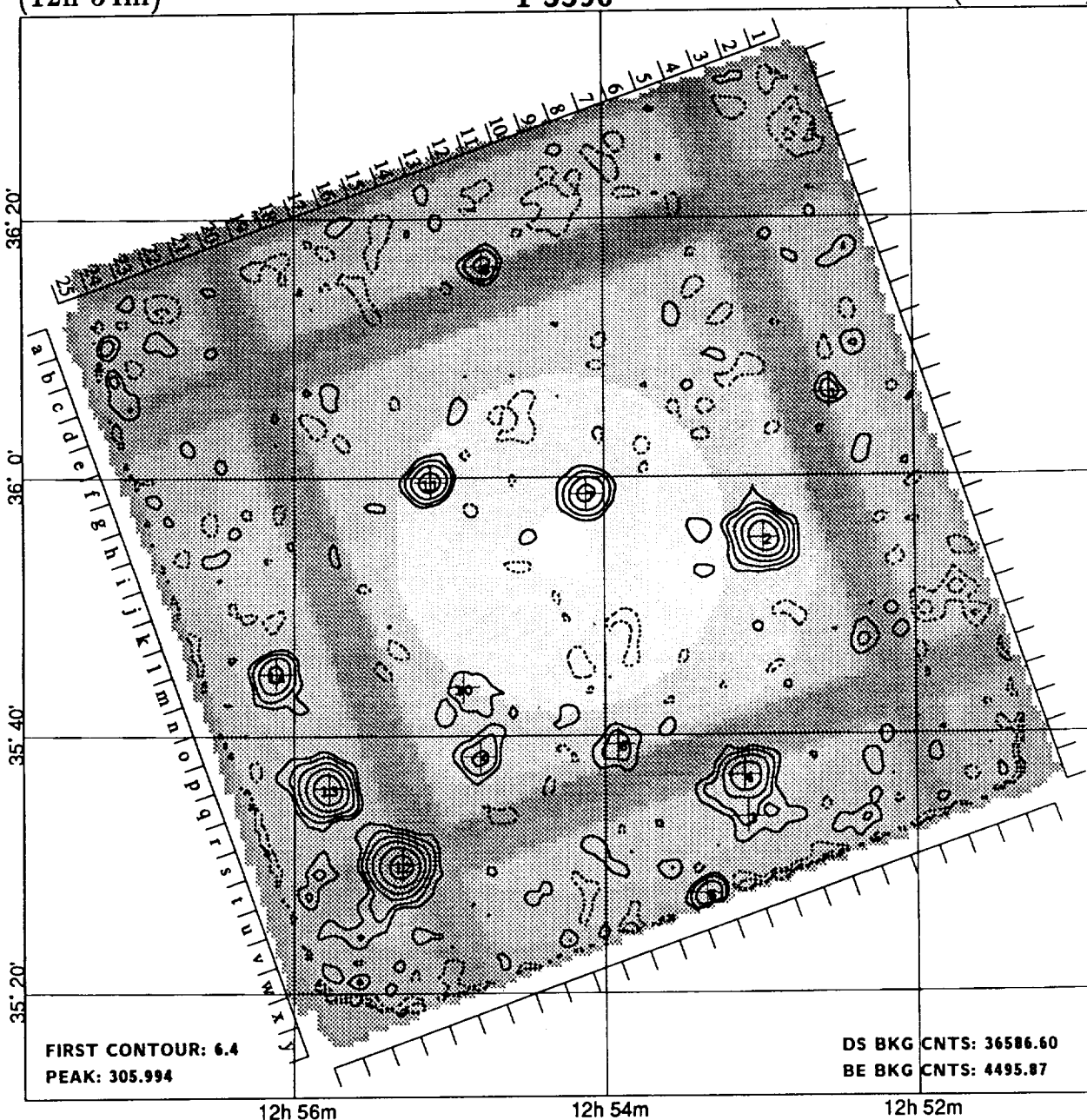
DATE: 1980/358 - 1980/358  
 LIVETIME: 2063.8s  
 ROLL ANGLE:  $-115.5^\circ$

NH:  $1.4E+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 54m)

I 5390

(12h 54m)



## SURVEY OF DEEP BRACCESI FIELD

FIELD CENTER:  $12^h 54^m 16.9^s$   $35^\circ 53' 59''$  (B1950)  
 $12^h 56^m 39.1^s$   $35^\circ 37' 47''$  (J2000)  
 $\ell: 115.81$   $b: 81.43$

DATE: 1980/182 - 1980/185  
 LIVETIME: 30711.8s  
 ROLL ANGLE:  $70.4^\circ$

NH:  $1.3E+20$   
 REF/ID: Q  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2891	1	12 52 32.5	36 06 27	56	*0.00256	0.00071	35.1	59.9	3.6	0.7	805	24.5	H	
2893	2	12 52 58.5	35 55 19	47	0.0383	0.0015	680.1	77.9	24.7	1.2	0	15.9	H	
2894	3	12 53 04.9	35 33 37	56	0.00298	0.00080	38.4	66.6	3.7	8.6	0	25.0	H	
2895	4	12 53 06.2	35 36 51	48	*0.0180	0.0012	256.5	43.5	14.8	1.7	805	22.1	H	
2897	5	12 53 20.9	35 27 40	50	*0.0108	0.0014	96.4	64.6	7.6	0.9	704	28.9	EH	
2903	6	12 53 55.0	35 39 20	50	*0.00393	0.00070	69.3	82.7	5.6	1.1	601	15.5	H	
2905	7	12 54 07.2	35 58 42	38	0.01287	0.00089	285.0	103.0	14.5	1.1	0	5.1	H	
2913	8	12 54 47.2	36 16 15	50	*0.00575	0.00082	83.9	59.1	7.0	0.9	905	23.1	H	
2914	9	12 54 48.3	35 38 23	50	0.00599	0.00077	101.1	68.9	7.8	1.1	0	17.2	H	
2916	10	12 54 54.7	35 43 47	46	0.00209	0.00059	39.6	83.4	3.6	1.2	0	12.7	H	

Source Table cont.

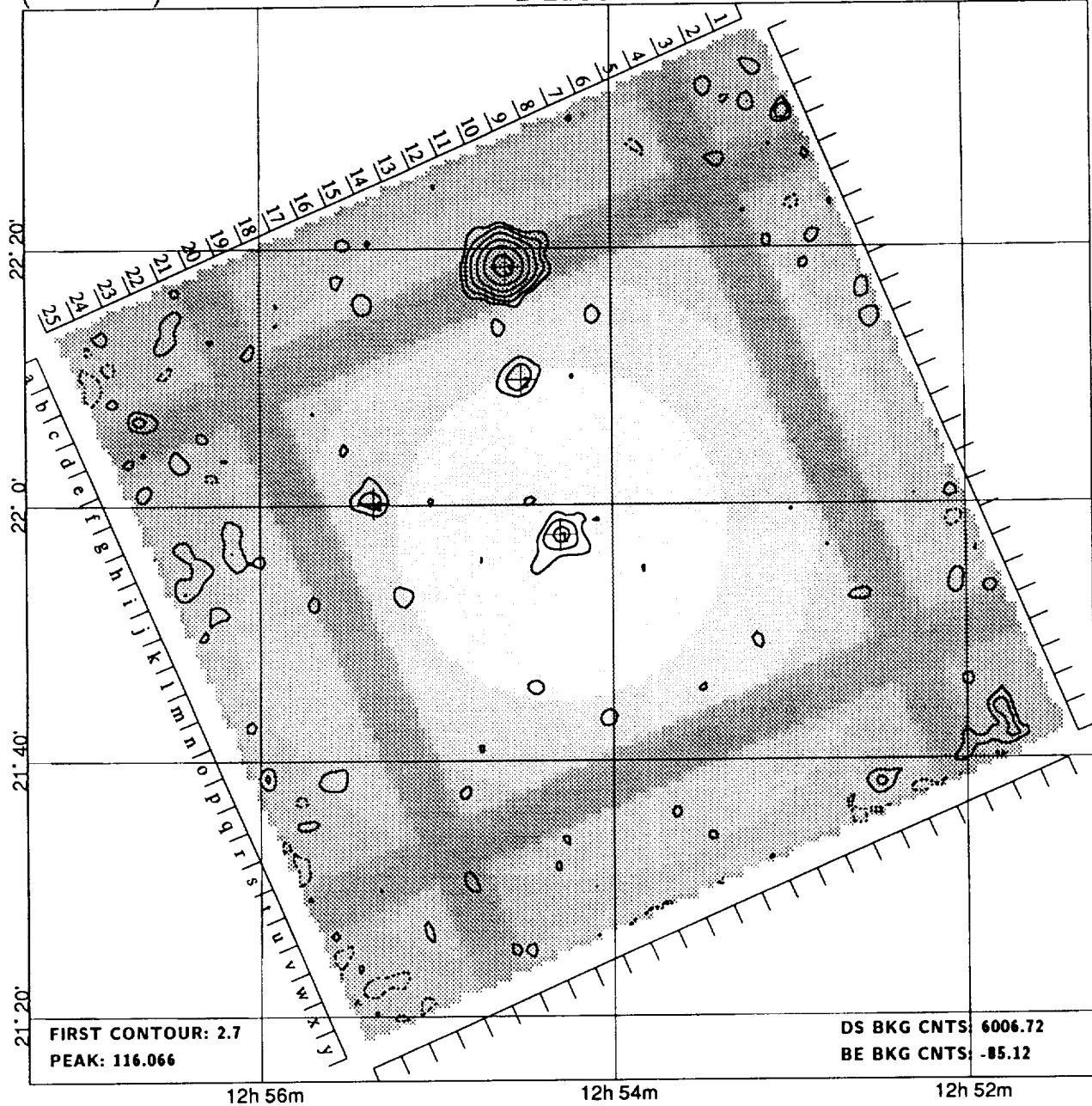
# I 5390 cont.

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2918	11	12 55 07.4	35 59 37	38	0.01332	0.00095	266.0	95.0	14.0	1.0	0	11.8	H	
2920	12	12 55 18.3	35 29 56	47	*0.0587	0.0023	693.8	39.2	25.6	1.5	1609	27.1	A	S
2923	13	12 55 46.6	35 35 57	47	0.0400	0.0019	504.5	61.5	21.2	1.3	0	25.6	AH	
2924	14	12 56 06.8	35 44 51	48	0.0127	0.0011	171.4	67.6	11.1	1.2	0	24.0	AH	

(12h 54m)

I 2136

(12h 54m)



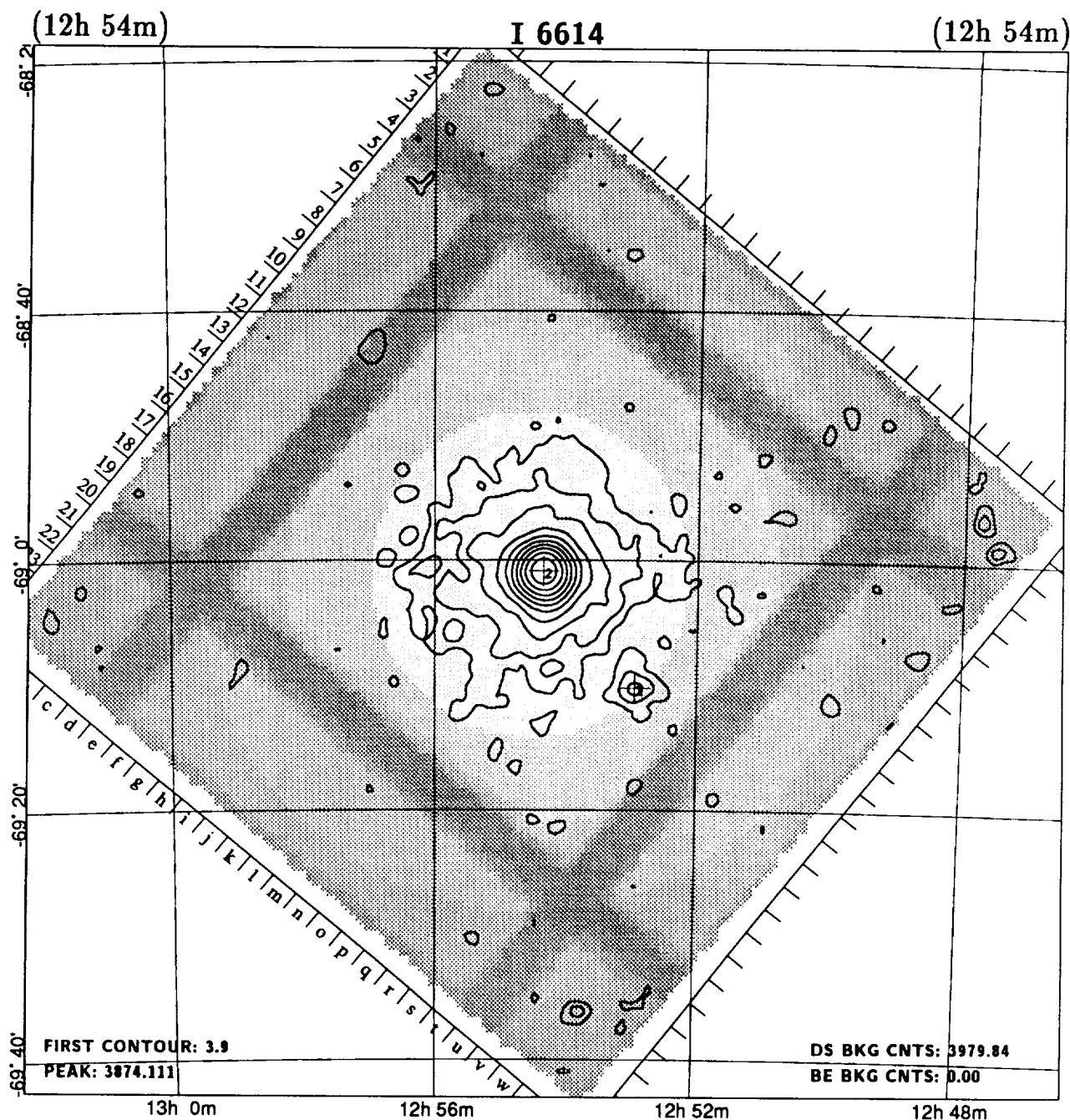
## X-RAY SURVEY OF NORMAL GALAXIES: NGC4826=M64

FIELD CENTER:  $12^{\text{h}}54^{\text{m}}18.0^{\text{s}}$   $21^{\circ}56'59''$  (B1950)  
 $12^{\text{h}}56^{\text{m}}45.3^{\text{s}}$   $21^{\circ}40'47''$  (J2000)  
 $l: 315.74$   $b: 84.42$

DATE: 1979/181 - 1980/181  
 LIVETIME: 4867.4s  
 ROLL ANGLE:  $66.4^{\circ}$

NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2907	1	12 54 17.8	21 57 41	35	0.0146	0.0023	53.2	14.8	6.5	1.2	0	0.8	H	
2910	2	12 54 30.9	22 09 49	42	0.0102	0.0022	31.2	12.8	4.7	0.9	0	13.3	H	
2912	3	12 54 36.1	22 18 34	47	*0.1470	0.0079	349.7	7.3	18.5	1.5	1409	21.9	AH	S
2921	4	12 55 21.5	22 00 09	55	0.0084	0.0021	24.1	10.9	4.1	0.8	0	15.3	H	



**2S 1254-690, INTERSTELLAR GRAIN HALOES**

FIELD CENTER:  $12^h 54^m 20.0^s$   $-69^\circ 01' 02''$  (B1950)  
 $12^h 57^m 36.2^s$   $-69^\circ 17' 15''$  (J2000)  
 $l: 303.48$   $b: -6.42$

DATE: 1980/237 - 1980/237  
 LIVETIME: 3225.0s  
 ROLL ANGLE:  $39.0^\circ$

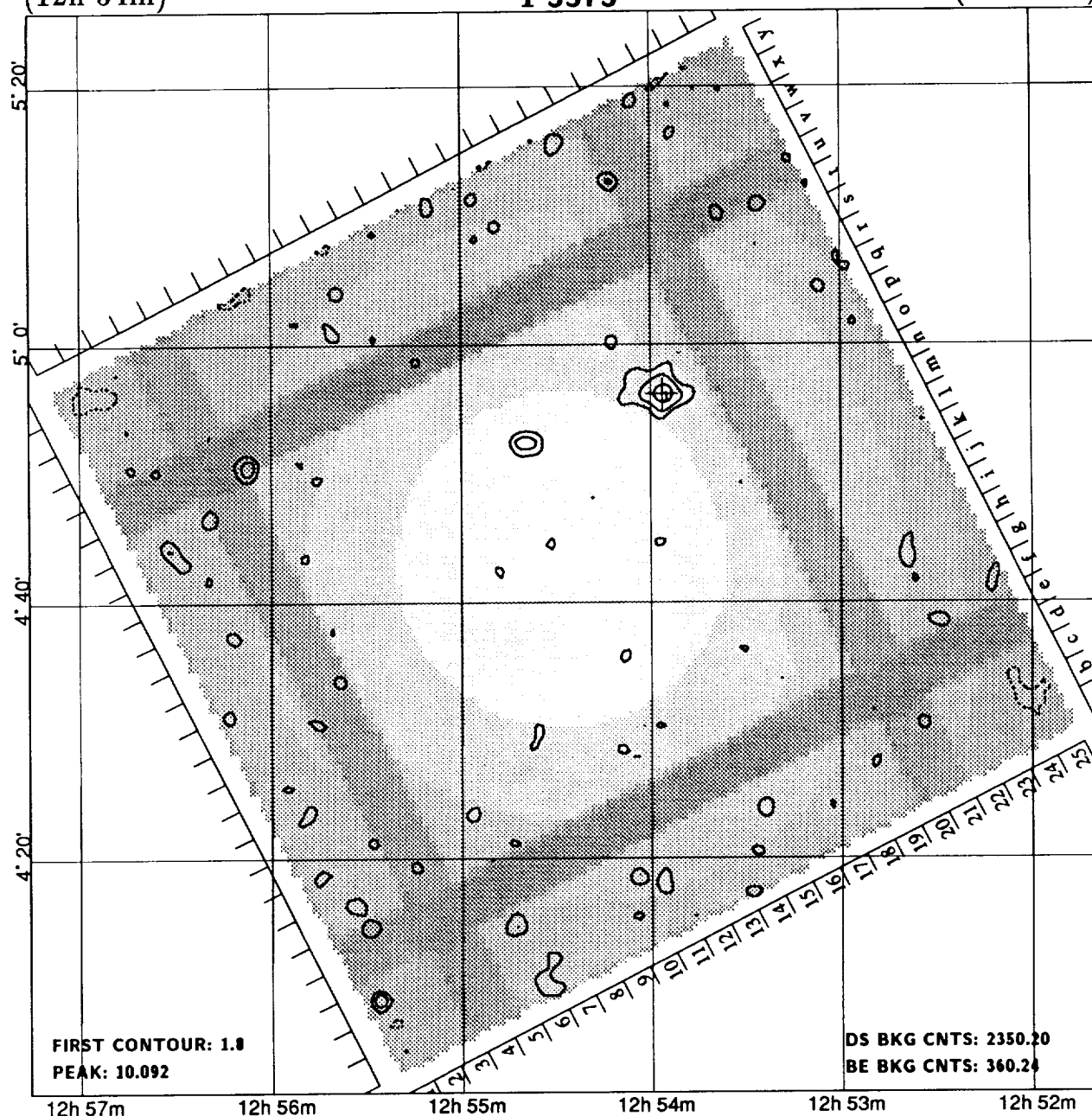
NH:  $1.5E+21$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2892	1L	12 52 56.5	-69 10 12	41	0.0210	0.0049	43.0	26.0	4.2	1.4	0	11.8	
2908	2L	12 54 20.7	-69 00 54	31	6.195	0.059	14876.9	1131.1	104.7	1.4	0	0.2	

(12h 54m)

I 5375

(12h 54m)



## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $12^h 54^m 27.4^s$   $04^\circ 43' 48''$  (B1950)  
 $12^h 56^m 59.8^s$   $04^\circ 27' 36''$  (J2000)  
 $l: 306.52$   $b: 67.29$

DATE: 1980/346 - 1980/346  
 LIVETIME: 1904.5s  
 ROLL ANGLE:  $-117.0^\circ$

NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS:

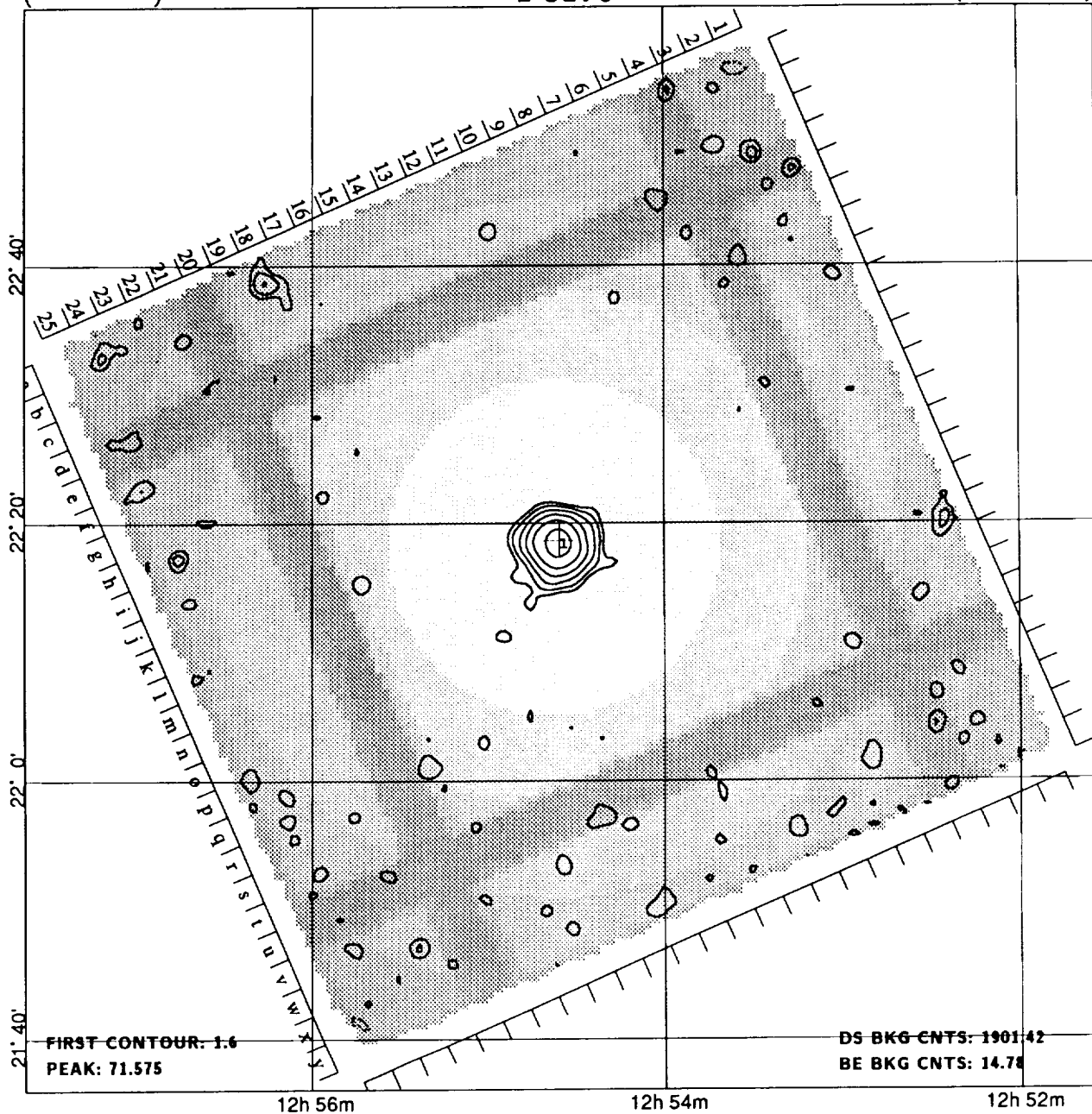
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2904	1	12 53 56.3	04 56 06	42	0.0265	0.0053	29.8	5.2	5.0	1.3	0	14.5	H



(12h 54m)

I 3176

(12h 54m)



## EG187: NEW WHITE DWARF X-RAY SOURCES

FIELD CENTER:  $12^{\text{h}}54^{\text{m}}36.0^{\text{s}}$   $22^{\circ}17'59''$  (B1950)  
 $12^{\text{h}}57^{\text{m}}03.2^{\text{s}}$   $22^{\circ}01'47''$  (J2000)  
 $l: 317.29$   $b: 84.74$

DATE: 1979/181 - 1979/181  
 LIVETIME: 1540.8s  
 ROLL ANGLE:  $66.6^{\circ}$

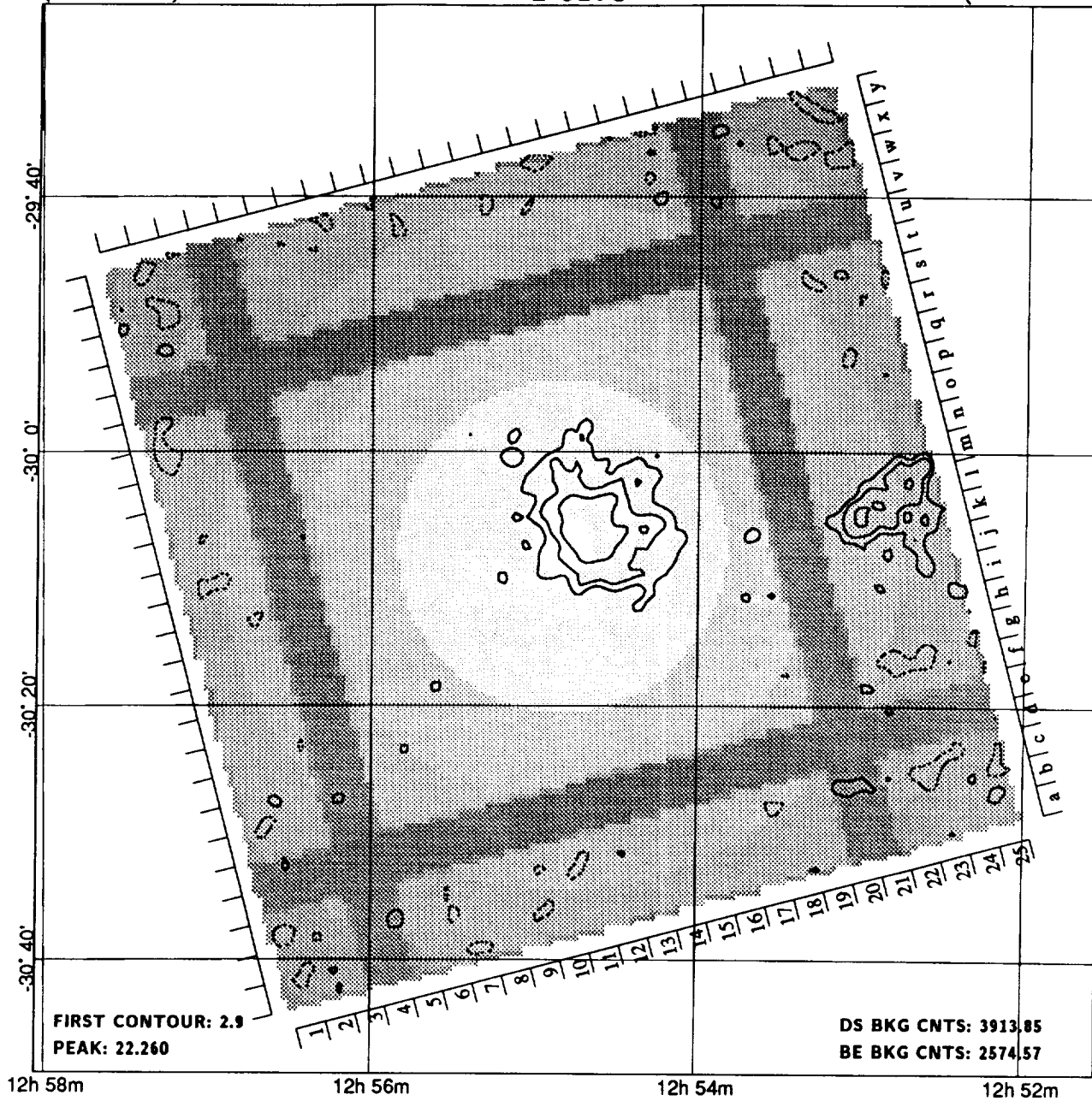
NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2912	1	12 54 35.7	22 18 39	31	0.308	0.016	354.3	4.7	18.7	2.1	0	0.4	AH	S

(12h 54m)

I 6173

(12h 54m)



FIELD CENTER:  $12^h 54^m 48.0^s$   $-30^\circ 06' 57''$  (B1950)  
 $12^h 57^m 31.2^s$   $-30^\circ 23' 09''$  (J2000)  
 $l: 304.49$   $b: 32.47$

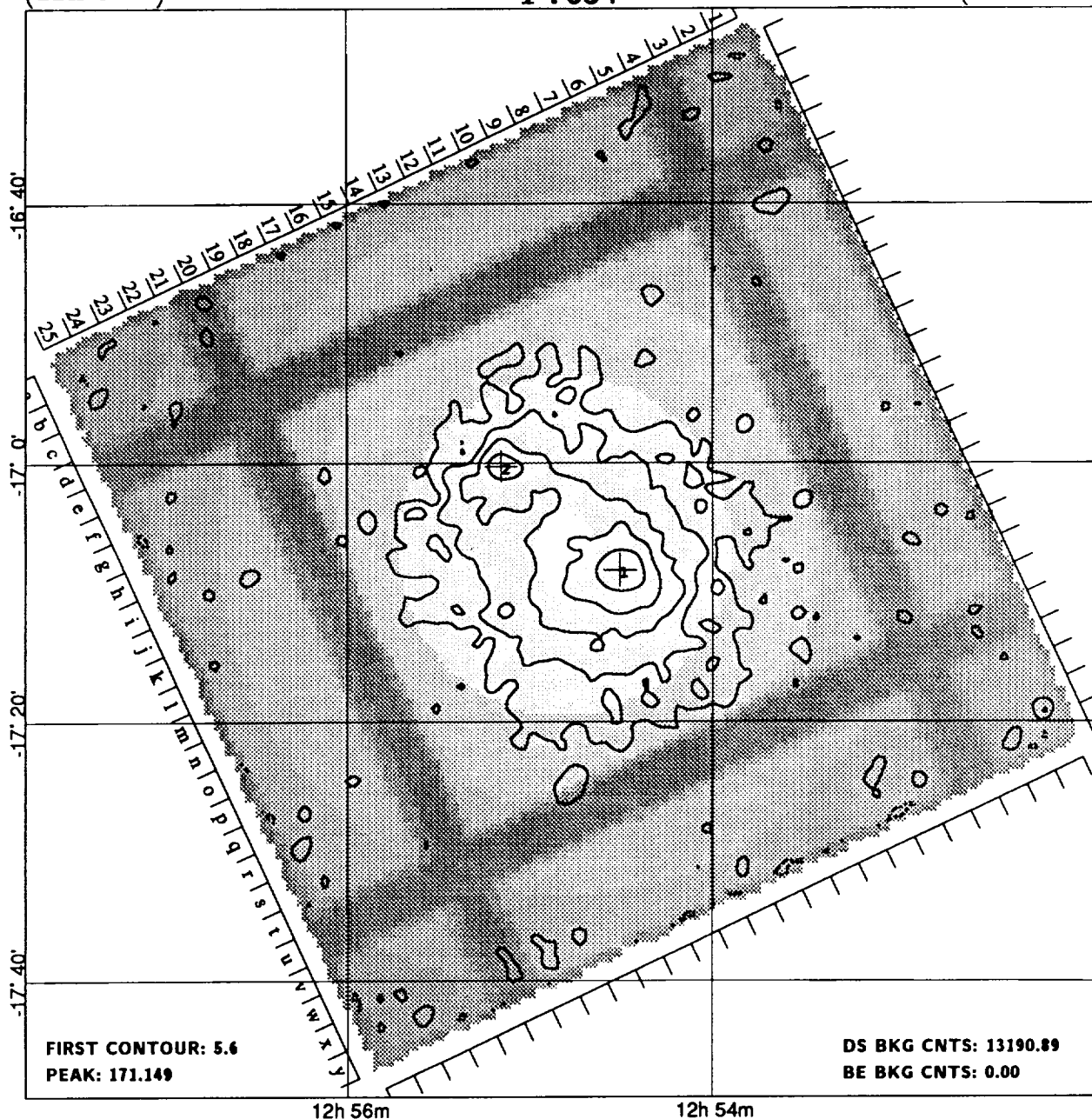
DATE: 1980/360 - 1980/360  
 LIVETIME: 3171.5s  
 ROLL ANGLE:  $-104.7^\circ$

NH:  $6.2E+20$   
 REF/ID:  
 FIELD FLAGS: LS

(12h 54m)

I 7654

(12h 54m)



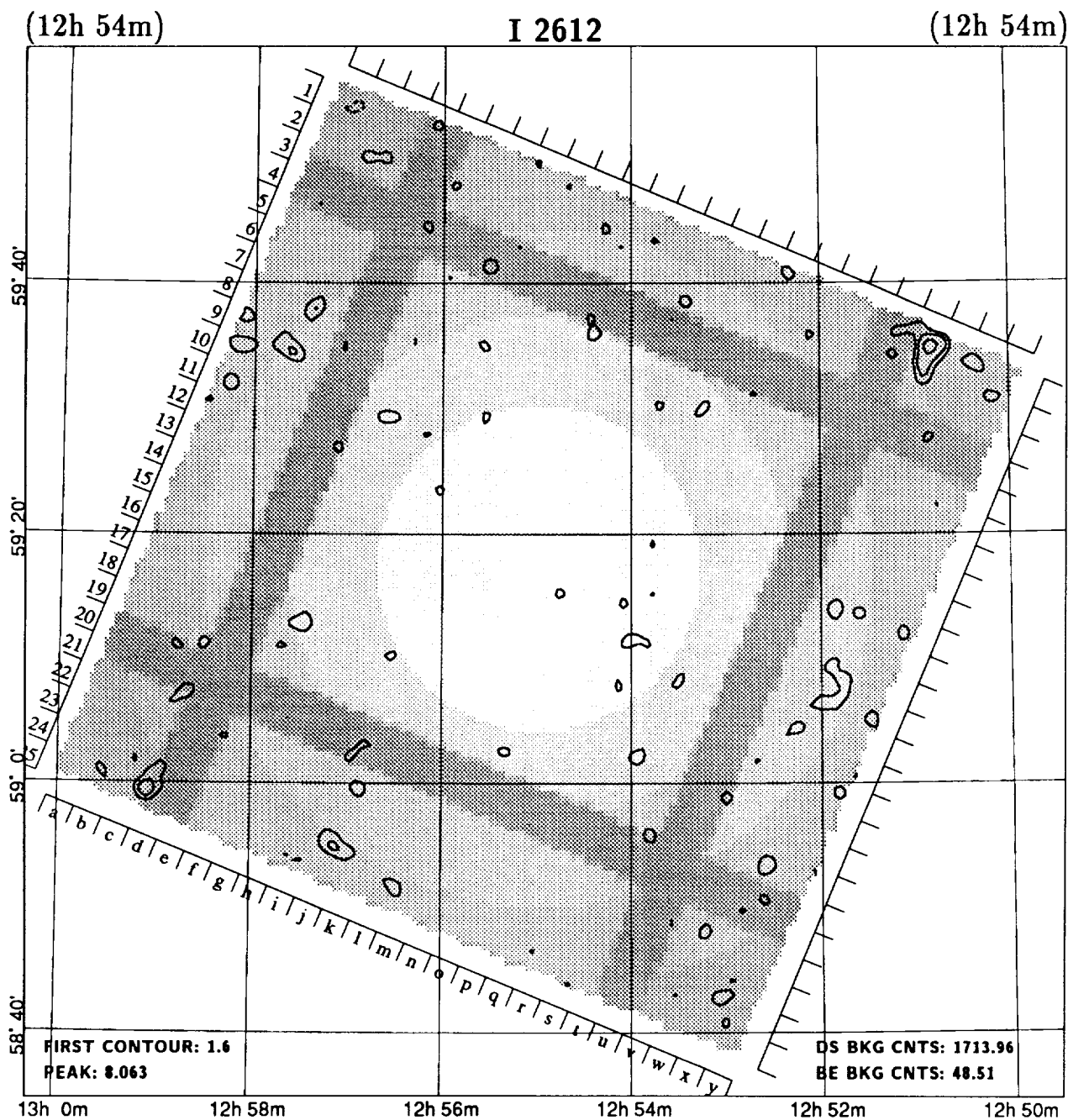
**ABELL 1644, CLUSTERS OF GALAXIES W/UNUSUAL OPTICAL MORPHOLOGY**

**FIELD CENTER:**  $12^{\text{h}}54^{\text{m}}49.4^{\text{s}}$   $-17^{\circ}07'01''$  (B1950)  
 $12^{\text{h}}57^{\text{m}}28.2^{\text{s}}$   $-17^{\circ}23'14''$  (J2000)  
 $l: 304.98$   $b: 45.46$

**DATE:** 1980/203 - 1980/204  
**LIVETIME:** 10689.0s  
**ROLL ANGLE:**  $64.9^{\circ}$

**NH:**  $4.7\text{E}+20$   
**REF/ID:**  
**FIELD FLAGS:** L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2909	1L	12 54 30.3	-17 08 21	31	0.0624	0.0048	478.4	425.6	12.9	9.9	0	4.9	
2919	2L	12 55 09.3	-17 00 16	38	0.0214	0.0030	157.1	164.9	7.0	27.7	0	8.1	



SEYFERT GALAXY SURVEY: MKN 231

FIELD CENTER:  $12^{\text{h}}54^{\text{m}}54.0^{\text{s}}$   $59^{\circ}16'59''$  (B1950)  
 $12^{\text{h}}57^{\text{m}}00.7^{\text{s}}$   $59^{\circ}00'47''$  (J2000)  
 $l: 121.57$   $b: 58.10$

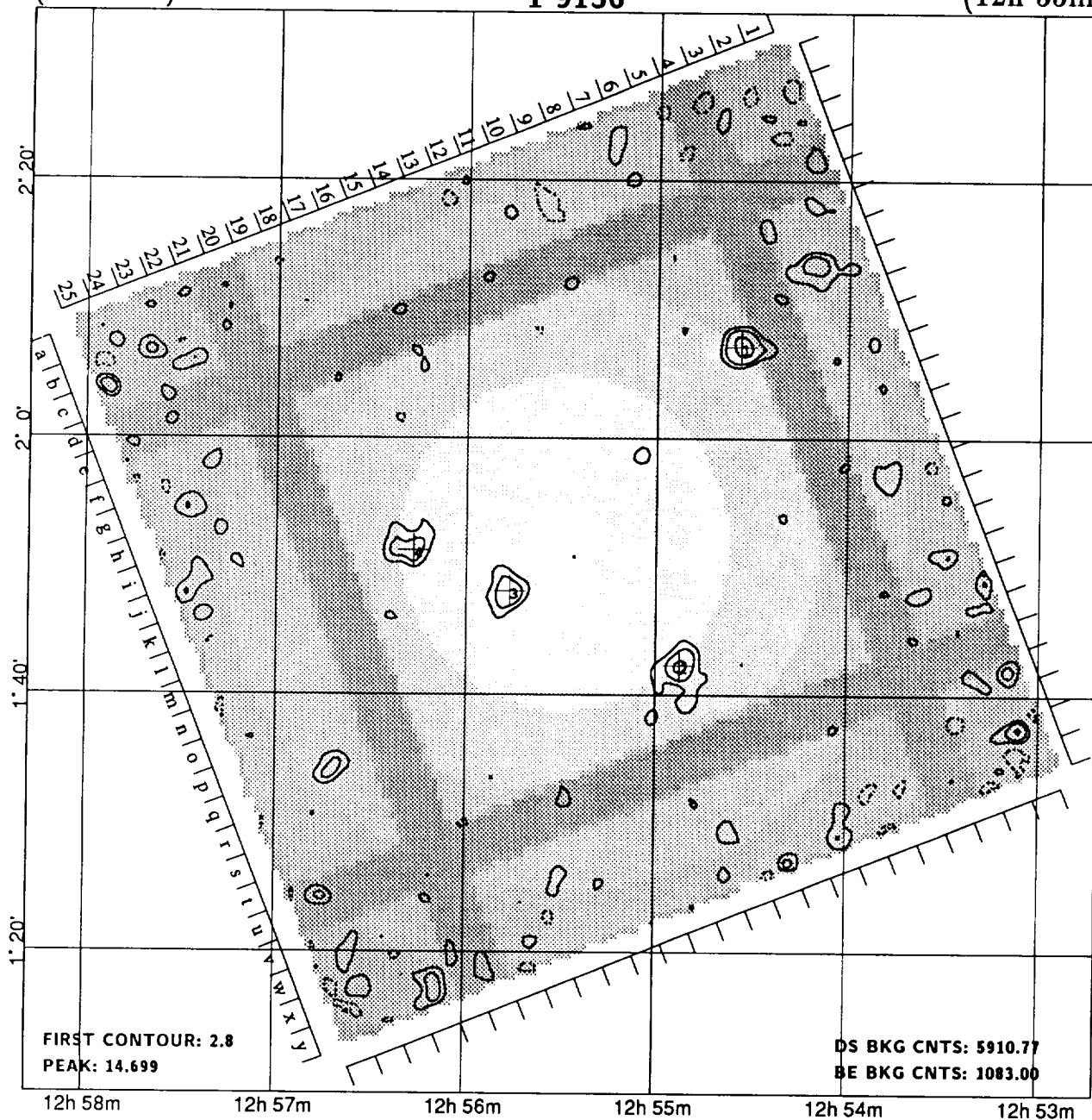
DATE: 1979/119 - 1979/119  
 LIVETIME: 1388.9s  
 ROLL ANGLE:  $22.5^{\circ}$

NH:  $1.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 55m)

I 9156

(12h 55m)

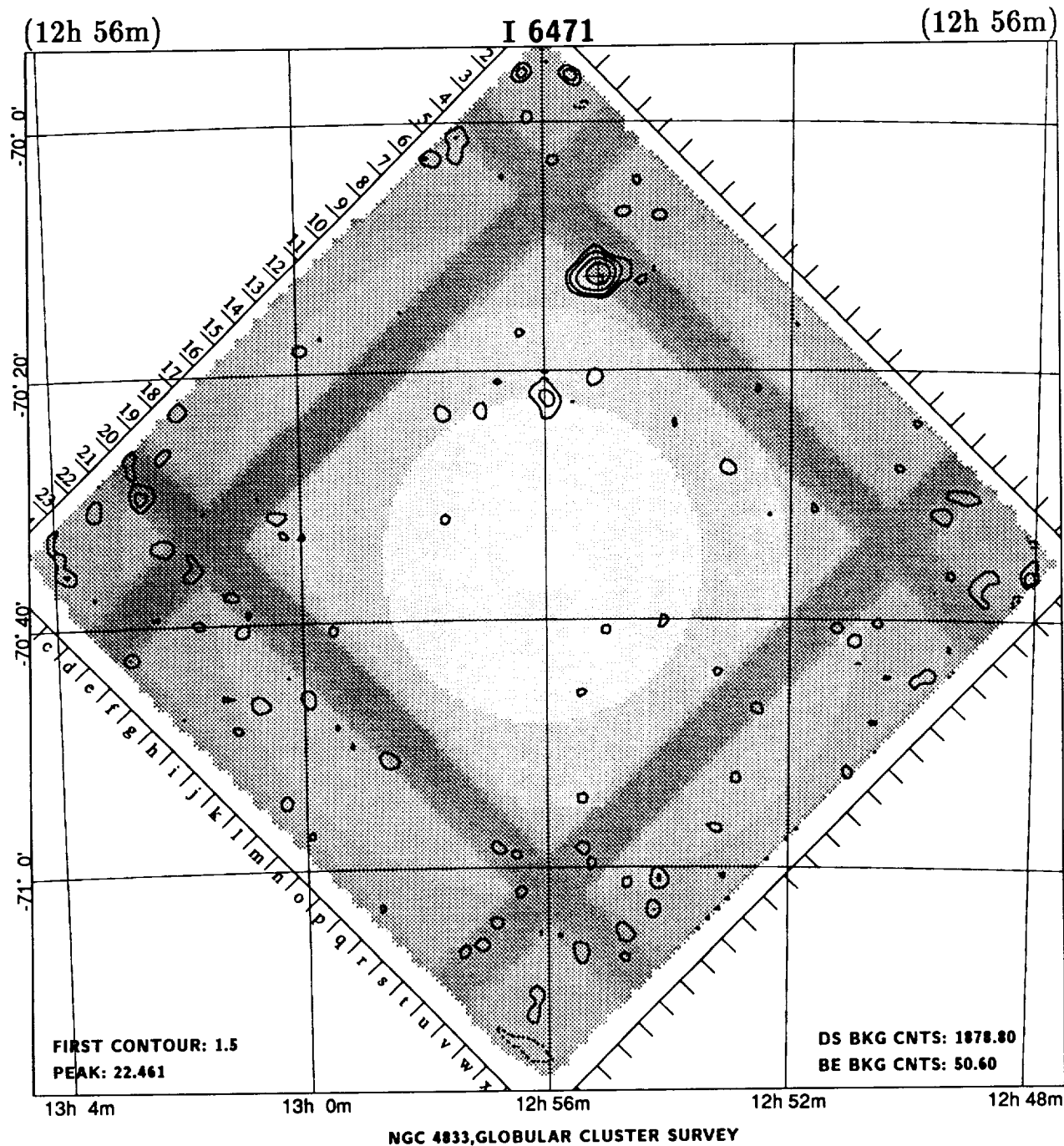
EMISSION BY S<sub>a</sub> GALAXIES: NGC 4845

FIELD CENTER: 12<sup>h</sup>55<sup>m</sup>30.0<sup>s</sup> 01°50'59" (B1950)  
 12<sup>h</sup>58<sup>m</sup>03.2<sup>s</sup> 01°34'48" (J2000)  
 $l$ : 306.76  $b$ : 64.40

DATE: 1980/198 - 1980/198  
 LIVETIME: 4789.7s  
 ROLL ANGLE: 68.5°

NH: 1.7E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2911	1	12 54 33.8	02 07 03	51	*0.0195	0.0032	46.9	11.1	6.2	1.1	602	21.6	H	
2915	2	12 54 52.5	01 42 16	41	0.0153	0.0026	45.6	16.4	5.8	1.2	0	12.7	H	
2922	3	12 55 46.2	01 48 07	42	0.0128	0.0023	43.4	16.6	5.6	1.0	0	5.1	H	
2926	4	12 56 16.7	01 51 15	42	0.0109	0.0023	33.4	14.6	4.8	1.3	0	12.4	H	



FIELD CENTER:  $12^h 56^m 00.0^s$   $-70^\circ 35' 59''$  (B1950)  
 $12^h 59^m 21.3^s$   $-70^\circ 52' 10''$  (J2000)  
 $l: 303.59$   $b: -8.01$

DATE: 1980/238 - 1980/238  
 LIVETIME: 1522.4s  
 ROLL ANGLE:  $45.4^\circ$

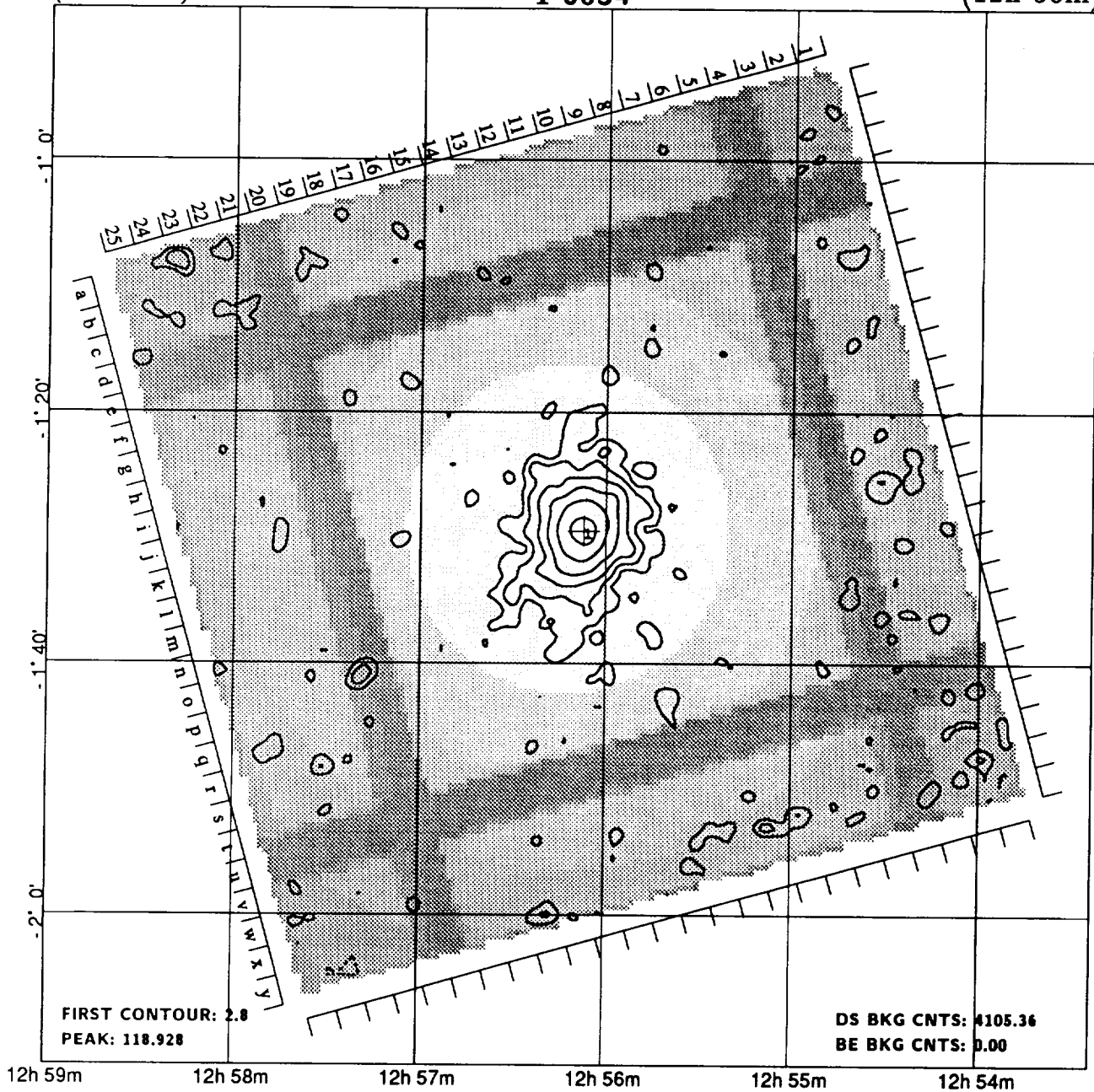
NH:  $1.5E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	$R'$	SRC FLG	ID
2917	1	12 55 07.2	-70 12 30	50	*0.075	0.011	52.3	2.7	7.1	1.1	906	24.0	H	

(12h 56m)

I 6034

(12h 56m)



## A1650, RICH CLUSTERS WITH DOMINANT GALAXIES

FIELD CENTER:  $12^{\text{h}}56^{\text{m}}12.0^{\text{s}}$   $-01^{\circ}29'59''$  (B1950)  
 $12^{\text{h}}58^{\text{m}}46.2^{\text{s}}$   $-01^{\circ}46'10''$  (J2000)  
 $l: 306.72$   $b: 61.05$

DATE: 1980/197 - 1980/197  
 LIVETIME: 3326.7s  
 ROLL ANGLE:  $74.4^{\circ}$

NH:  $1.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

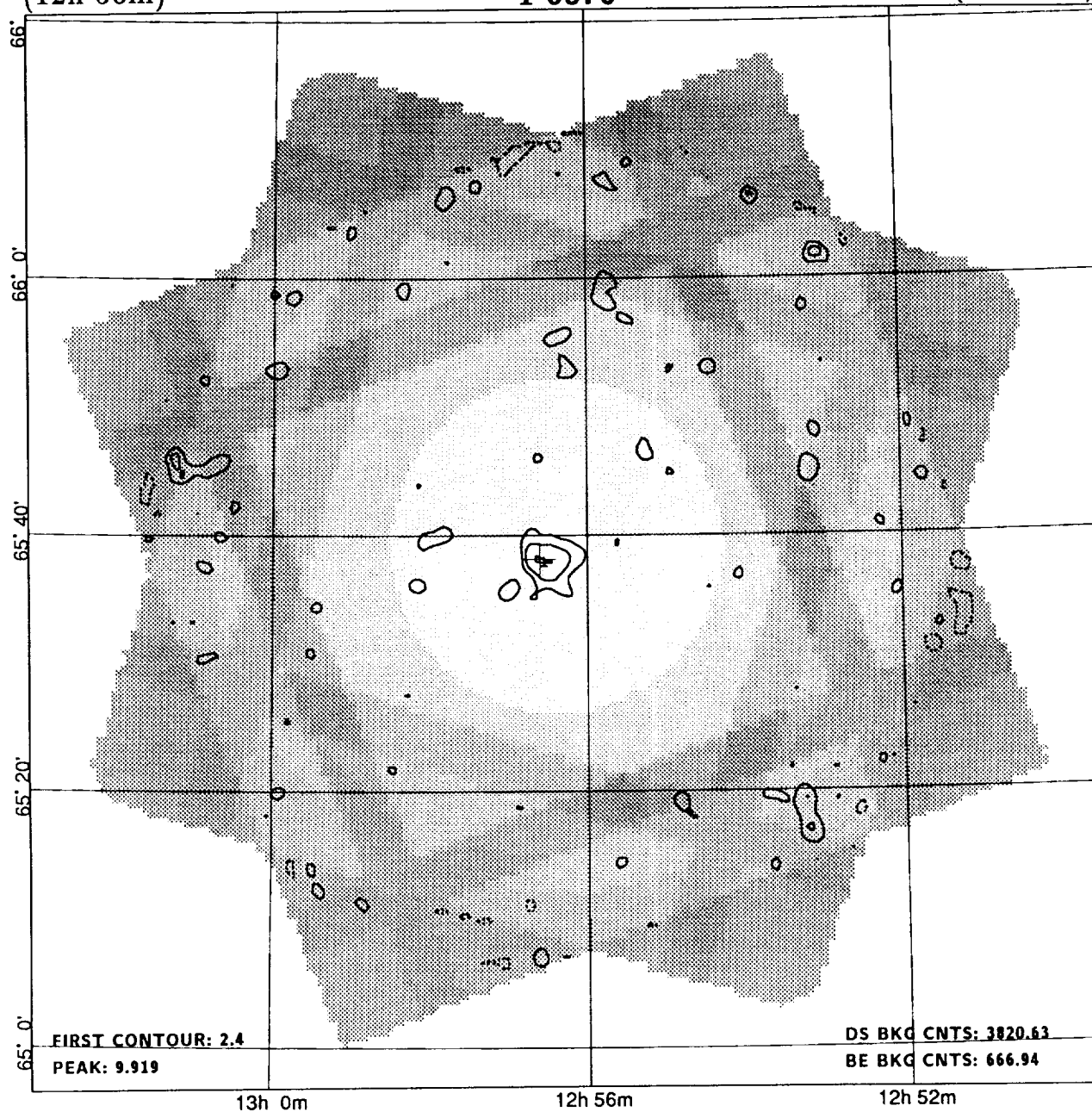
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2925	1L	12 56 07.2	-01 29 22	31	0.126	0.012	310.3	294.7	10.2	3.4	0	1.3	



(12h 56m)

I 6876

(12h 56m)



A1655, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER: 12<sup>h</sup>56<sup>m</sup>18.0<sup>s</sup> 65°38'59" (B1950)  
 12<sup>h</sup>58<sup>m</sup>15.4<sup>s</sup> 65°22'48" (J2000)  
 $l$ : 121.79  $b$ : 51.73

DATE: 1980/114 - 1980/357  
 LIVETIME: 3207.2s

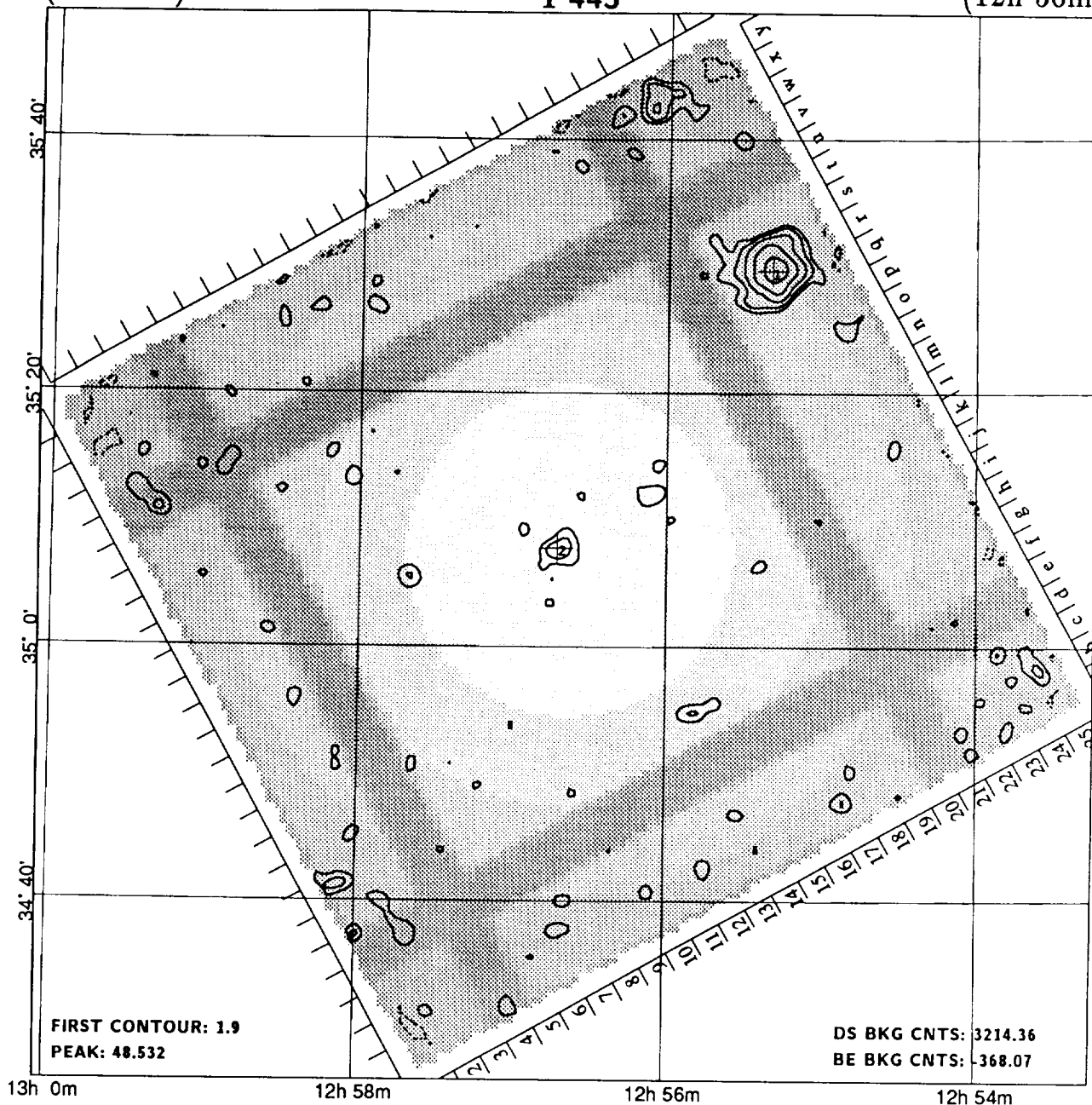
NH: 1.9E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2928	1	12 56 36.5	65 38 08	35	0.0197	0.0032	46.7	11.3	6.1	1.6	0	2.1	H	CLG

(12h 56m)

I 445

(12h 56m)



## NGC 4861 ABNORMAL GALAXIES SURVEY

FIELD CENTER:  $12^h 56^m 39.6^s$   $35^\circ 07' 53''$  (B1950)  
 $12^h 59^m 01.6^s$   $34^\circ 51' 43''$  (J2000)  
 $l: 111.54$   $b: 82.10$

DATE: 1978/352 - 1978/352  
 LIVETIME: 2604.7s  
 ROLL ANGLE:  $-119.2^\circ$

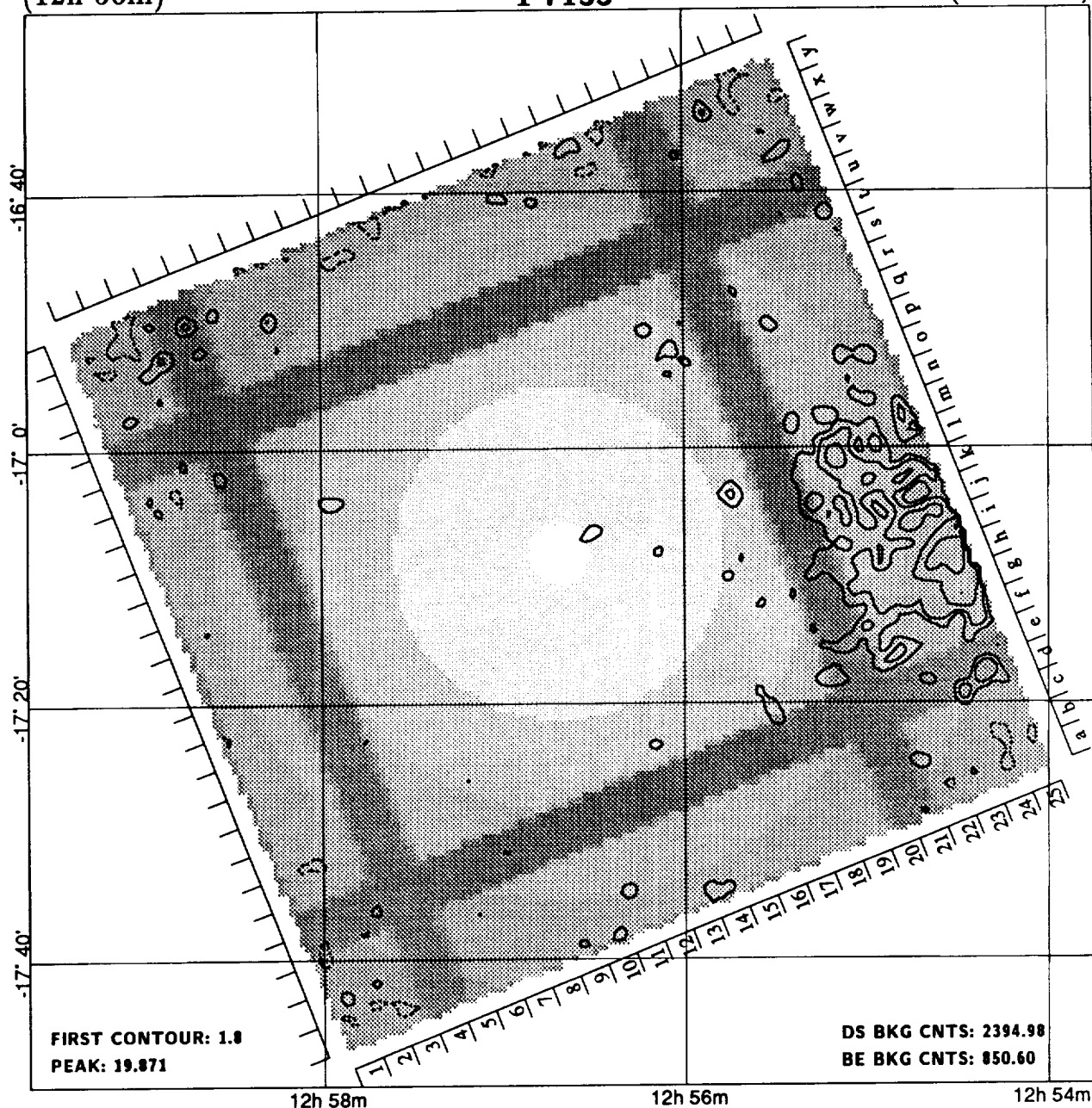
NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2920	1	12 55 19.4	35 29 36	48	0.105	0.010	108.0	4.0	10.2	1.8	0	27.4	AH	S
2929	2	12 56 42.7	35 07 48	37	0.0119	0.0028	23.0	6.0	4.3	0.9	0	0.4	H	G

(12h 56m)

I 7135

(12h 56m)



**FIELD CENTER:**  $12^h 56^m 40.8^s$   $-17^\circ 07' 47''$  (B1950)  
 $12^h 59^m 19.7^s$   $-17^\circ 23' 58''$  (J2000)  
 $l: 305.61$   $b: 45.43$

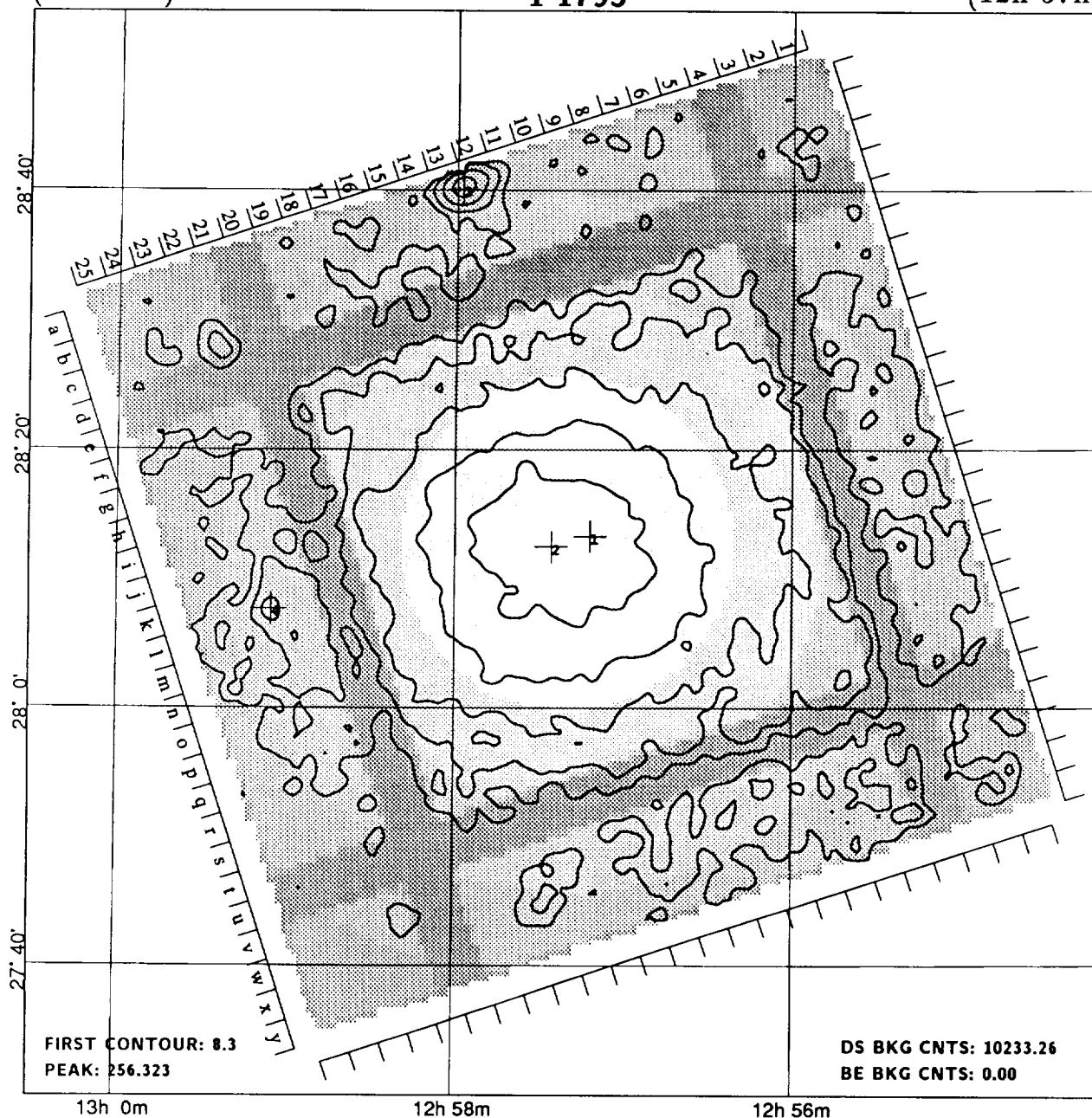
**DATE:** 1980/ 1 - 1980/ 1  
**LIVETIME:** 1940.8s  
**ROLL ANGLE:**  $-111.5^\circ$

**NH:**  $4.8E+20$   
**REF/ID:**  
**FIELD FLAGS:** LS

(12h 57m)

I 1793

(12h 57m)



## A1656 (COMA): STUDY, CLUSTERS OF GALAXIES

FIELD CENTER:  $12^{\text{h}}57^{\text{m}}20.8^{\text{s}}$   $28^{\circ}11'59''$  (B1950)  
 $12^{\text{h}}59^{\text{m}}45.5^{\text{s}}$   $27^{\circ}55'50''$  (J2000)  
 $l: 56.92$   $b: 87.99$

DATE: 1979/191 - 1979/191

NH: 9.0E+19

LIVETIME: 8292.3s

REF/ID:

ROLL ANGLE: 72.0°

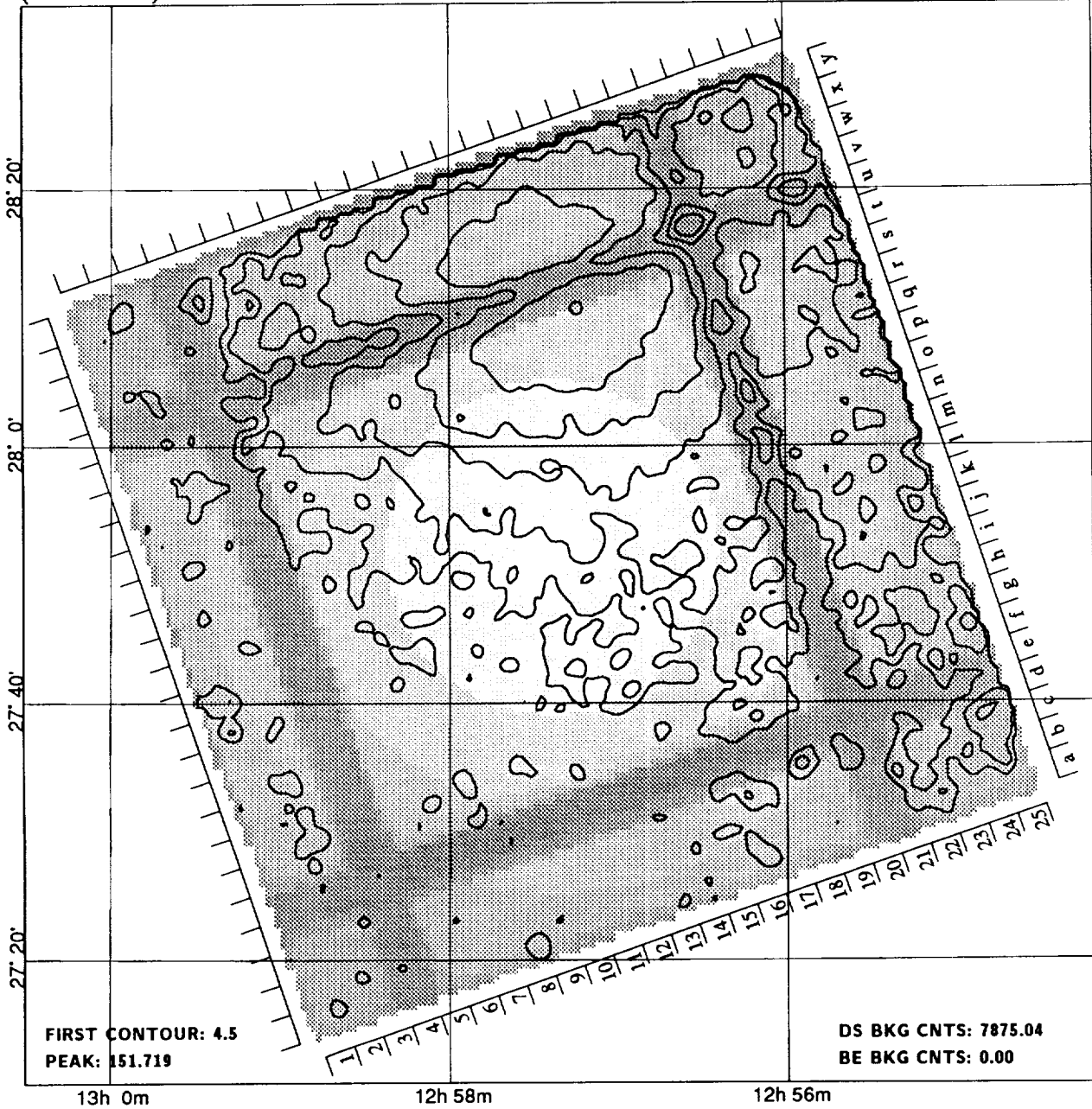
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT ± RATE	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2931	1L	12 57 11.7	28 13 19	31	0.0352 0.0076	215.7	1040.3	4.6	46.5	0	2.4		CLG
2932	2L	12 57 25.5	28 12 31	31	0.0491 0.0079	301.3	1094.7	6.2	42.9	0	1.0		CLG
2935	3L	12 57 58.0	28 40 05	50	0.0441 0.0060	133.8	79.2	7.1	1.5	500	29.3	A	Q
2944	4L	12 59 05.3	28 07 40	51	0.0161 0.0039	59.9	77.1	4.0	325.7	0	23.4		

(12h 57m)

I 1790

(12h 57m)



## A1656 (COMA): STUDY, CLUSTERS OF GALAXIES

FIELD CENTER:  $12^{\text{h}}57^{\text{m}}21.0^{\text{s}}$   $27^{\circ}52'29''$  (B1950)  
 $12^{\text{h}}59^{\text{m}}45.8^{\text{s}}$   $27^{\circ}36'20''$  (J2000)  
 $l: 47.89$   $b: 88.09$

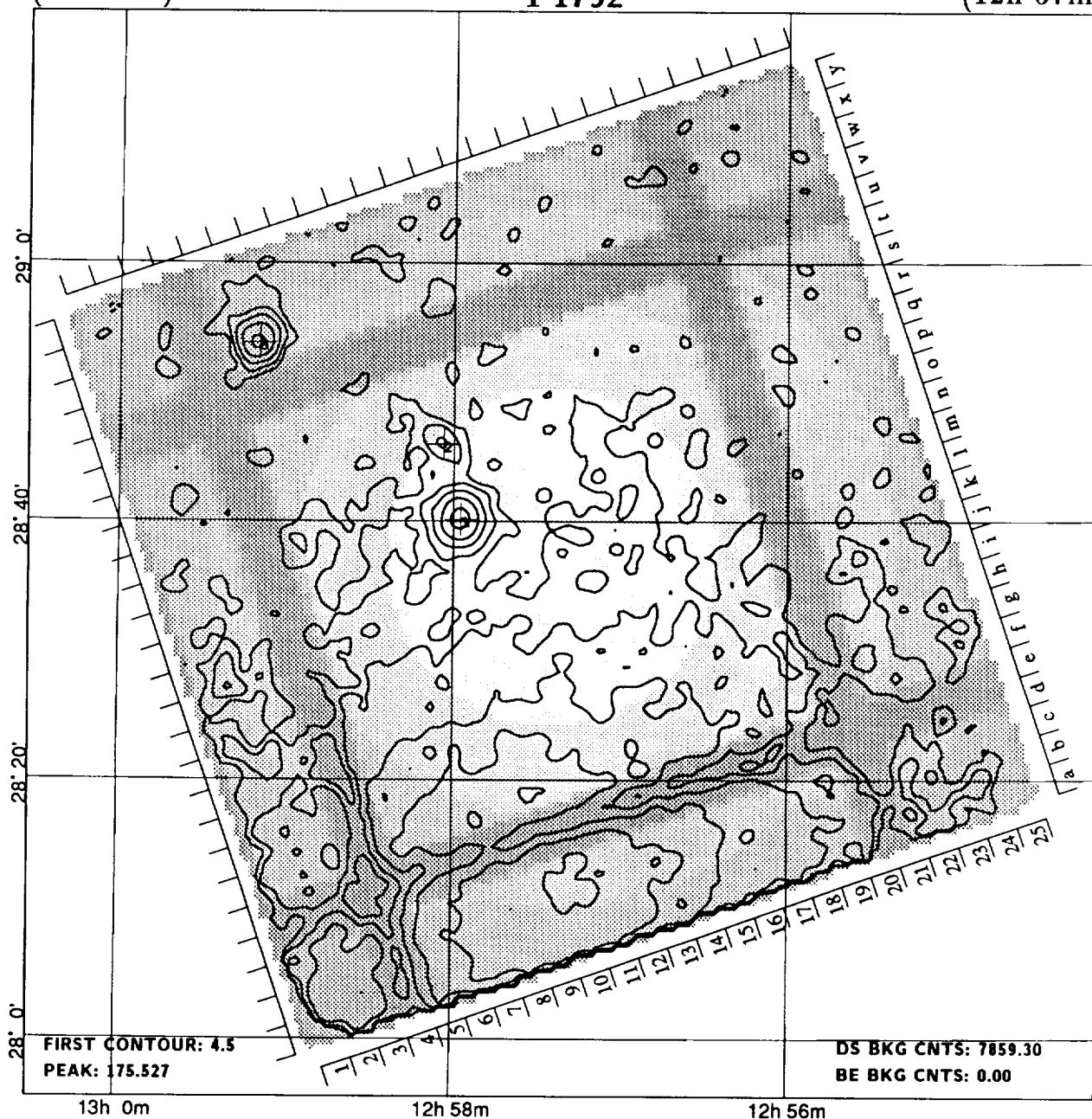
DATE: 1979/ 6 - 1979/ 6  
 LIVETIME: 6381.4s  
 ROLL ANGLE:  $-108.9^{\circ}$

NH:  $9.0\text{E}+19$   
 REF/ID:  
 FIELD FLAGS: LS

(12h 57m)

I 1792

(12h 57m)



## A1656 (COMA): STUDY, CLUSTERS OF GALAXIES

FIELD CENTER:  $12^{\text{h}}57^{\text{m}}21.0^{\text{s}}$   $28^{\circ}37'29''$  (B1950)  
 $12^{\text{h}}59^{\text{m}}45.6^{\text{s}}$   $28^{\circ}21'20''$  (J2000)  
 $\ell: 67.10$   $b: 87.79$

DATE: 1979/ 6 - 1979/ 6  
 LIVETIME: 6368.6s  
 ROLL ANGLE:  $-108.9^{\circ}$

NH:  $9.2\text{E}+19$   
 REF/ID:  
 FIELD FLAGS: DLS

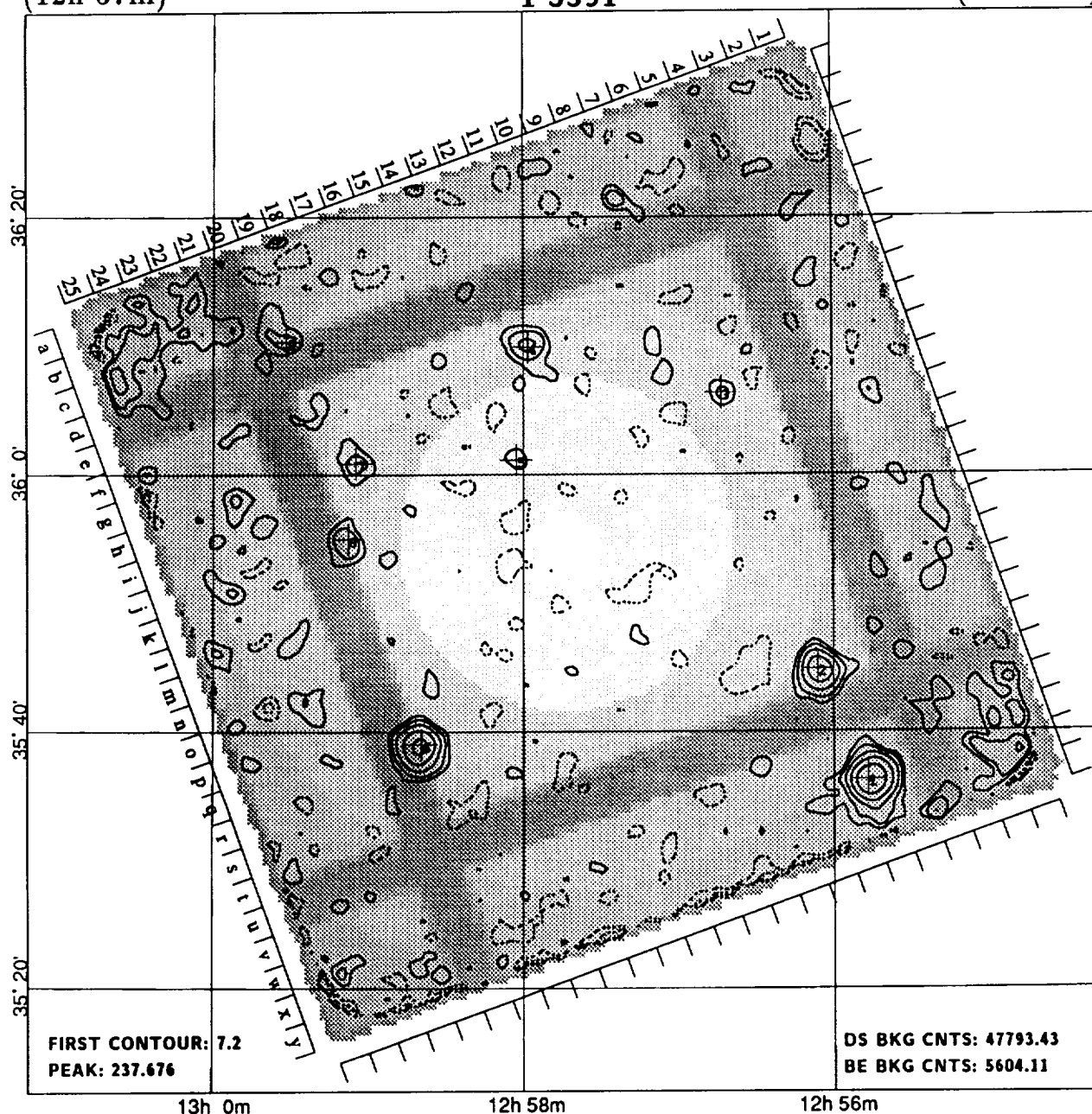
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2935	1L	12 57 57.4	28 40 08	38	0.0671	0.0055	294.2	119.8	12.1	81.0	0	8.5	A	Q
2938	2L	12 58 03.7	28 46 01	41	0.0125	0.0029	50.7	42.3	4.2	404.1	0	12.8		Q
2946	3L	12 59 10.2	28 53 48	48	0.0613	0.0067	145.7	39.3	9.0	1.5	200	29.0	A	CV



(12h 57m)

I 5391

(12h 57m)



## SURVEY OF DEEP BRACCISI FIELD

FIELD CENTER: 12<sup>h</sup>57<sup>m</sup>44.3<sup>s</sup> 35°53'59" (B1950)

DATE: 1980/184 - 1980/187

NH: 1.2E+20

13<sup>h</sup>00<sup>m</sup>05.8<sup>s</sup> 35°37'50" (J2000)

LIVETIME: 40119.2s

REF/ID: Q

ℓ: 111.22 b: 81.30

ROLL ANGLE: 70.2°

FIELD FLAGS:

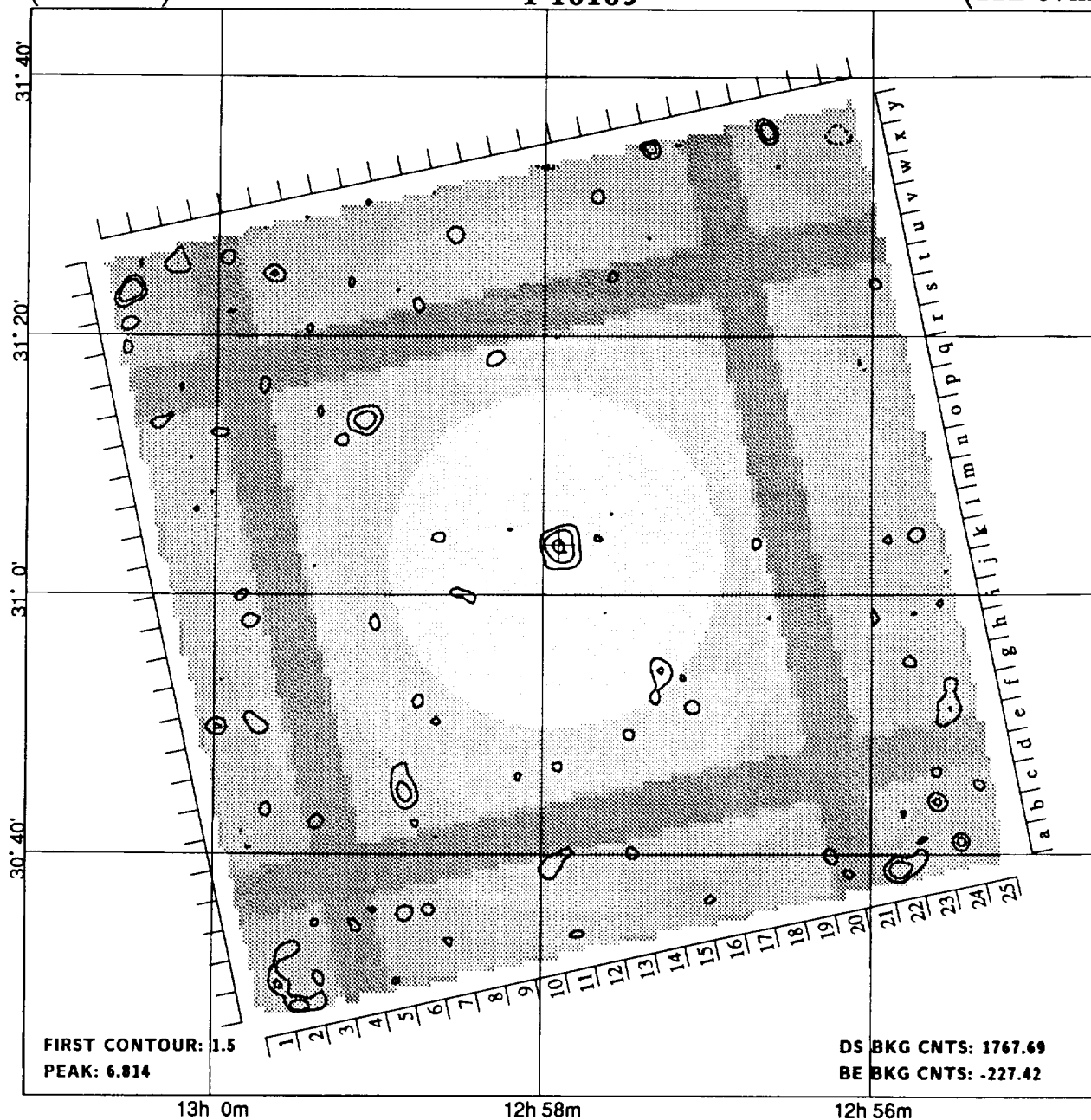
CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2923	1	12 55 46.8	35 36 12	47	0.0330	0.0017	463.5	81.5	19.9	1.3	0	29.7	AH	
2924	2	12 56 06.2	35 44 55	47	0.01324	0.00097	255.1	90.9	13.7	1.2	300	21.8	AH	
2930	3	12 56 43.1	36 06 24	52	0.00228	0.00056	51.3	108.7	4.1	0.5	0	17.5		
2936	4	12 57 58.2	36 09 58	50	0.00475	0.00062	110.8	100.2	7.6	1.1	0	16.4		
2937	5	12 58 02.7	36 01 10	41	0.00179	0.00051	49.5	149.5	3.5	0.5	0	8.3		
2942	6	12 58 39.6	35 39 00	47	*0.0195	0.0011	406.3	79.7	18.4	1.2	905	18.9	AH	
2943	7	12 59 04.9	36 00 53	51	0.00252	0.00059	55.3	110.7	4.3	0.9	0	18.1	H	
2945	8	12 59 07.9	35 55 04	51	*0.00350	0.00057	78.3	85.7	6.1	1.0	905	17.2	AH	
2948	9	12 59 31.8	36 10 22	55	*0.00242	0.00066	38.6	71.4	3.7	1.5	1106	27.2	AH	



(12h 57m)

I 10109

(12h 57m)



## 37 COM,HERTZSPRUNG GAP AND RELATED STARS

FIELD CENTER: 12<sup>h</sup>57<sup>m</sup>53.0<sup>s</sup> 31°03'15" (B1950)  
13<sup>h</sup>00<sup>m</sup>16.5<sup>s</sup> 30°47'06" (J2000)  
 $l$ : 95.60  $b$ : 85.86

DATE: 1981/ 16 - 1981/ 16  
LIVETIME: 1432.4s  
ROLL ANGLE: -102.1°

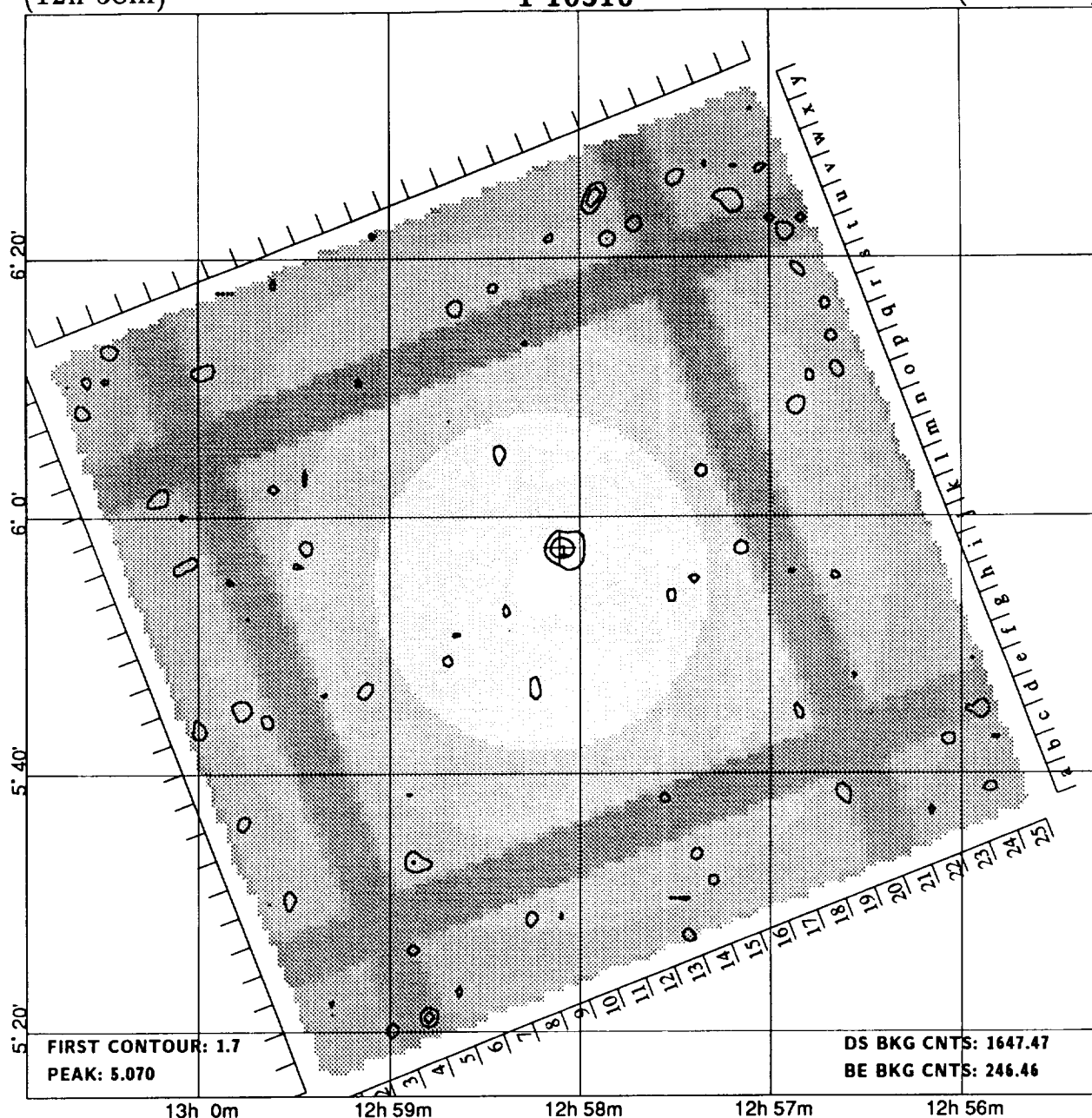
NH: 1.1E+20  
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2934	1	12 57 54.2	31 03 51	36	0.0240	0.0051	25.5	3.5	4.7	1.0	0	0.8	H	

(12h 58m)

I 10310

(12h 58m)

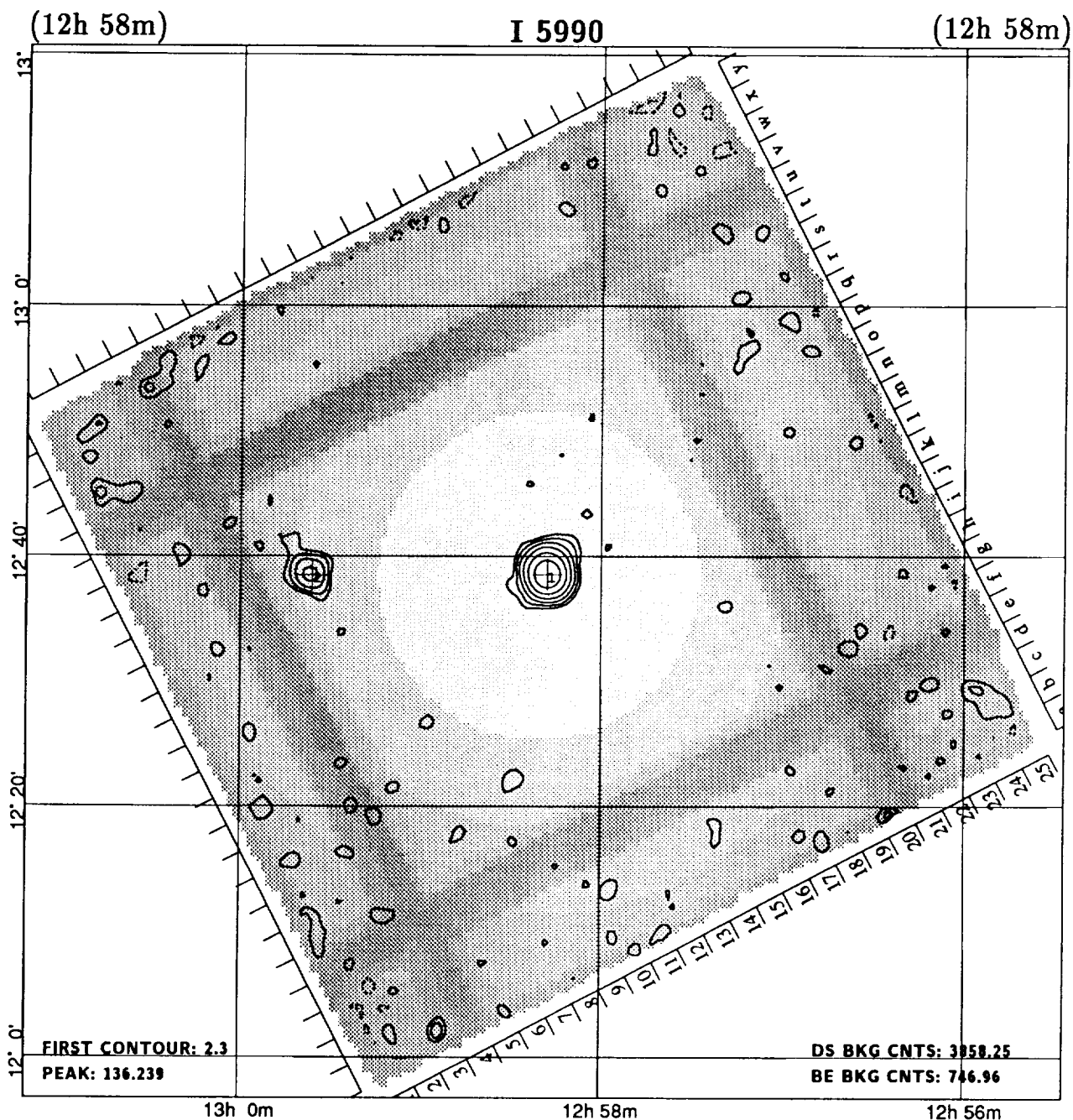


FIELD CENTER:  $12^{\text{h}}58^{\text{m}}05.0^{\text{s}}$   $05^{\circ}57'05''$  (B1950)  
 $13^{\text{h}}00^{\text{m}}37.0^{\text{s}}$   $05^{\circ}40'57''$  (J2000)  
 $l: 309.16$   $b: 68.44$

DATE: 1980/347 - 1980/347  
 LIVETIME: 1335.0s  
 ROLL ANGLE:  $-111.3^{\circ}$

NH:  $2.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2939	1	12 58 06.4	05 57 34	37	0.0182	0.0048	17.7	4.3	3.8	1.0	0	0.8	H	S



Chromospherically Active Stars: 494 (M2e)

FIELD CENTER:  $12^{\text{h}}58^{\text{m}}19.0^{\text{s}}$   $12^{\circ}38'41''$  (B1950)  
 $13^{\text{h}}00^{\text{m}}48.9^{\text{s}}$   $12^{\circ}22'33''$  (J2000)  
 $\ell$ : 311.86  $b$ : 75.00

DATE: 1979/352 - 1979/352

LIVETIME: 3126.5s

ROLL ANGLE:  $-117.5^{\circ}$

NH:  $2.2\text{E}+20$

REF/ID:

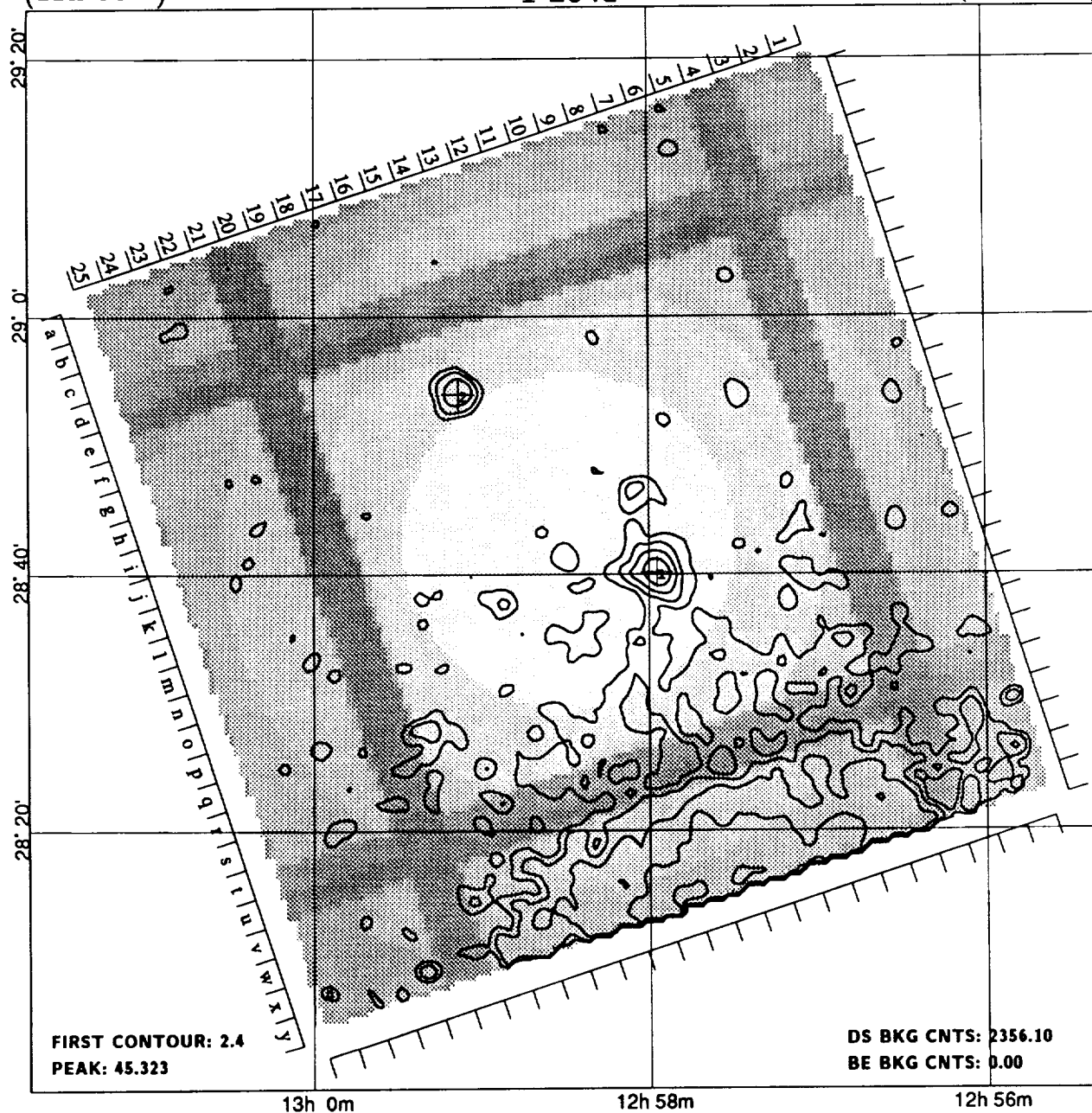
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2940	1	12 58 17.9	12 38 34	31	0.256	0.011	597.9	12.1	24.2	1.3	0	0.2	H	
2949	2	12 59 36.2	12 38 31	50	0.0412	0.0052	69.2	7.8	7.9	1.1	0	19.1	H	

(12h 58m)

I 2041

(12h 58m)



## X-RAY STUDY OF QUASARS: 2 5C'S + W61972

FIELD CENTER:  $12^h 58^m 30.0^s$   $28^\circ 41' 59''$  (B1950)  
 $13^h 00^m 54.4^s$   $28^\circ 25' 51''$  (J2000)  
 $l: 65.36$   $b: 87.53$

DATE: 1979/191 - 1979/191  
 LIVETIME: 1909.2s  
 ROLL ANGLE:  $71.9^\circ$

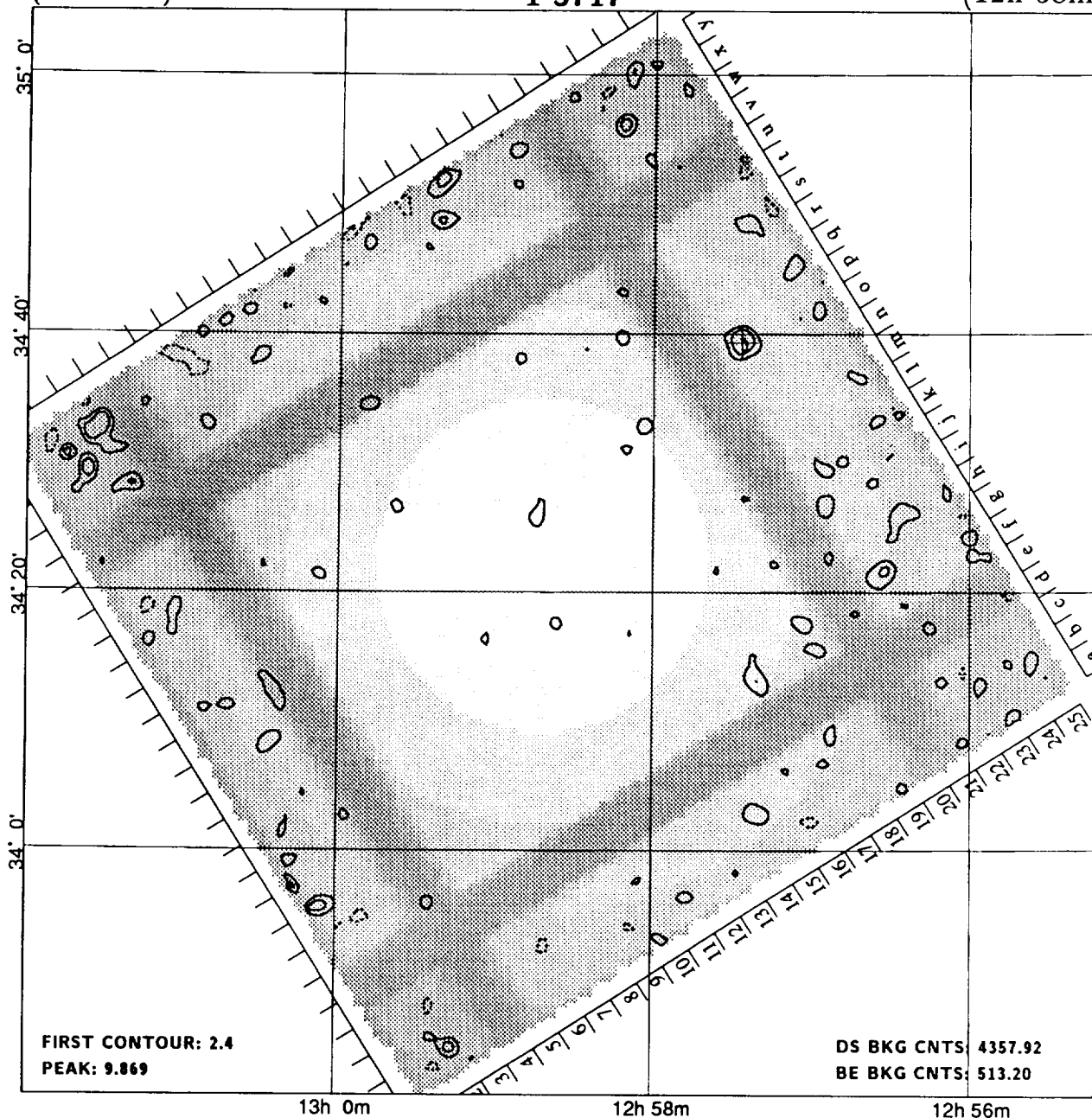
NH:  $9.2E+19$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2935	1L	12 57 57.1	28 40 11	38	0.078	0.010	103.5	34.5	7.4	32.9	0	7.5	A	Q
2946	2L	12 59 08.2	28 54 00	41	0.0502	0.0082	57.7	10.3	6.0	1.1	0	14.8	A	CV

(12h 58m)

I 5717

(12h 58m)



## MEDIUM DEPTH SURVEY: BSO 6

FIELD CENTER:  $12^h 58^m 35.0^s$   $34^\circ 22' 58''$  (B1950)  
 $13^h 00^m 57.0^s$   $34^\circ 06' 50''$  (J2000)  
 $l: 107.20$   $b: 82.72$

DATE: 1979/348 - 1979/348  
 LIVETIME: 3531.4s  
 ROLL ANGLE:  $-122.3^\circ$

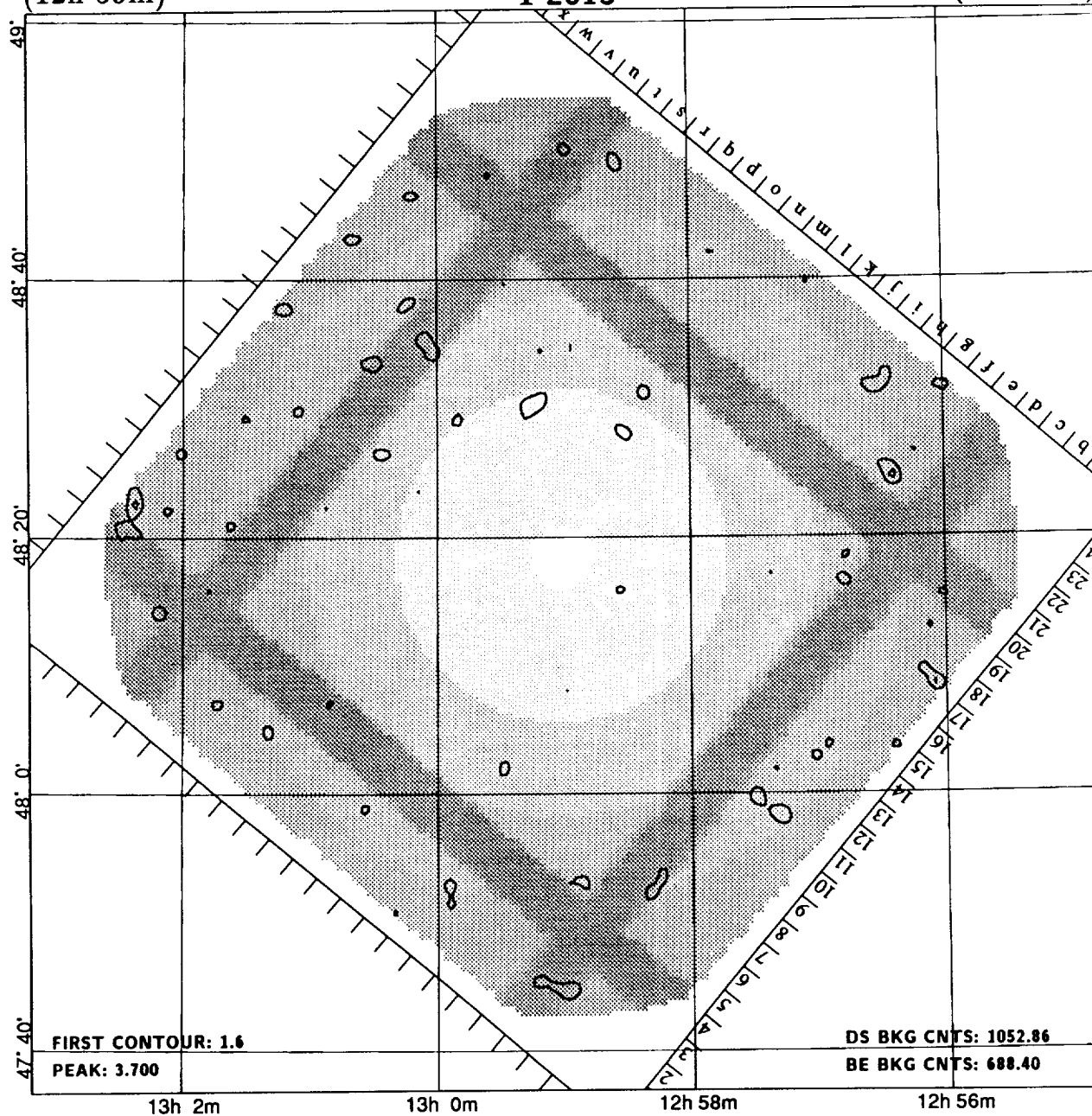
NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2933	1	12 57 26.4	34 39 22	52	0.0138	0.0034	22.4	7.6	4.1	0.7	100	21.7	H	

(12h 59m)

I 2613

(12h 59m)



## SEYFERT GALAXY SURVEY: MKN 236

FIELD CENTER:  $12^{\text{h}}59^{\text{m}}00.0^{\text{s}}$   $48^{\circ}18'59''$  (B1950)  
 $13^{\text{h}}01^{\text{m}}14.4^{\text{s}}$   $48^{\circ}02'52''$  (J2000)  
 $l: 118.36$   $b: 68.99$

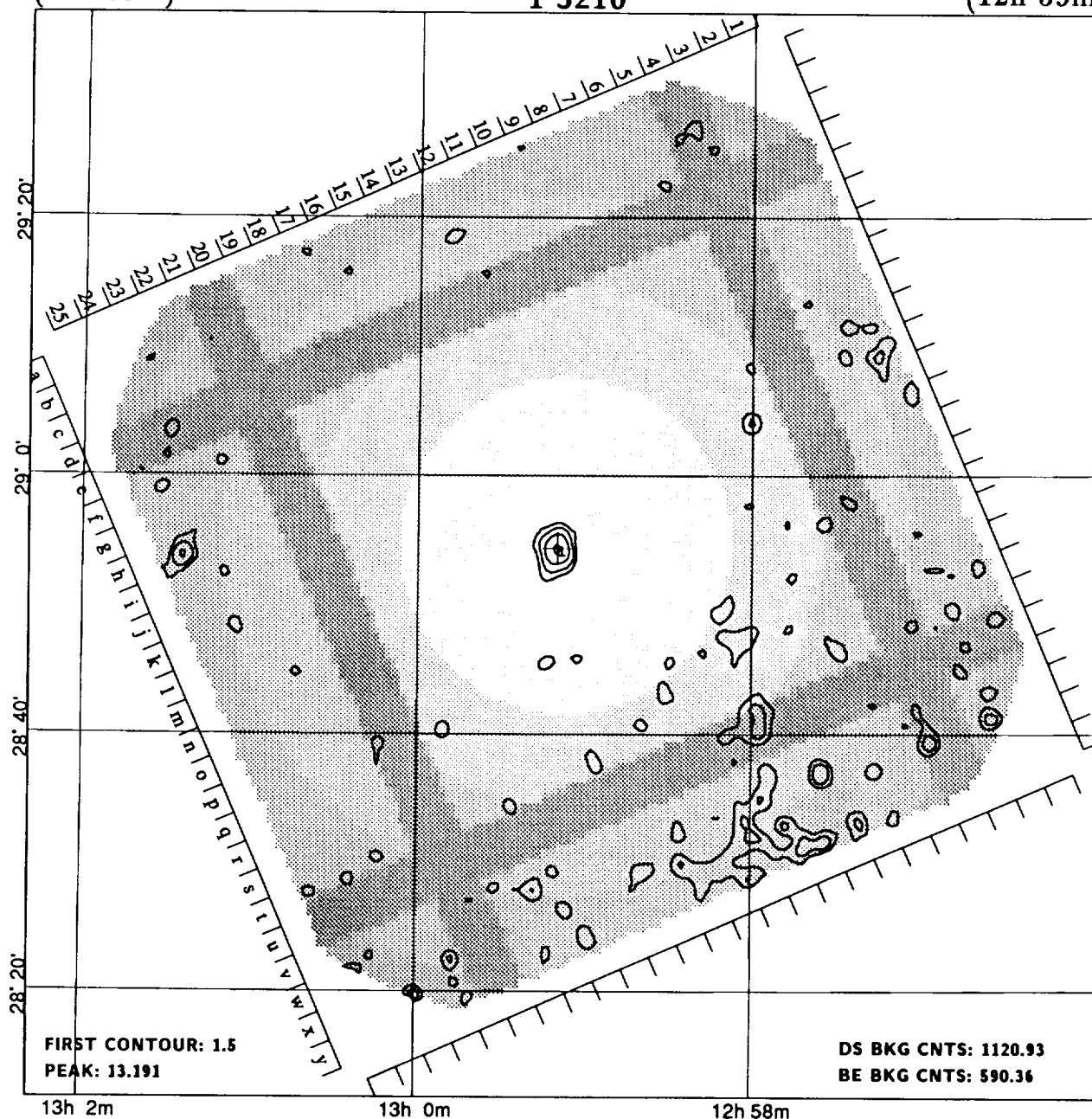
DATE: 1979/325 - 1979/325  
 LIVETIME: 853.2s  
 ROLL ANGLE:  $-140.3^{\circ}$

NH:  $1.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(12h 59m)

I 3210

(12h 59m)



RS CVN SYSTEMS: UX COM

FIELD CENTER:  $12^{\text{h}}59^{\text{m}}07.5^{\text{s}}$   $28^{\circ}53'47''$  (B1950)  
 $13^{\text{h}}01^{\text{m}}31.7^{\text{s}}$   $28^{\circ}37'40''$  (J2000)  
 $l: 67.44$   $b: 87.31$

DATE: 1979/181 - 1979/181  
 LIVETIME: 908.3s  
 ROLL ANGLE:  $66.6^{\circ}$

NH:  $9.3\text{E}+19$   
 REF/ID:  
 FIELD FLAGS: L

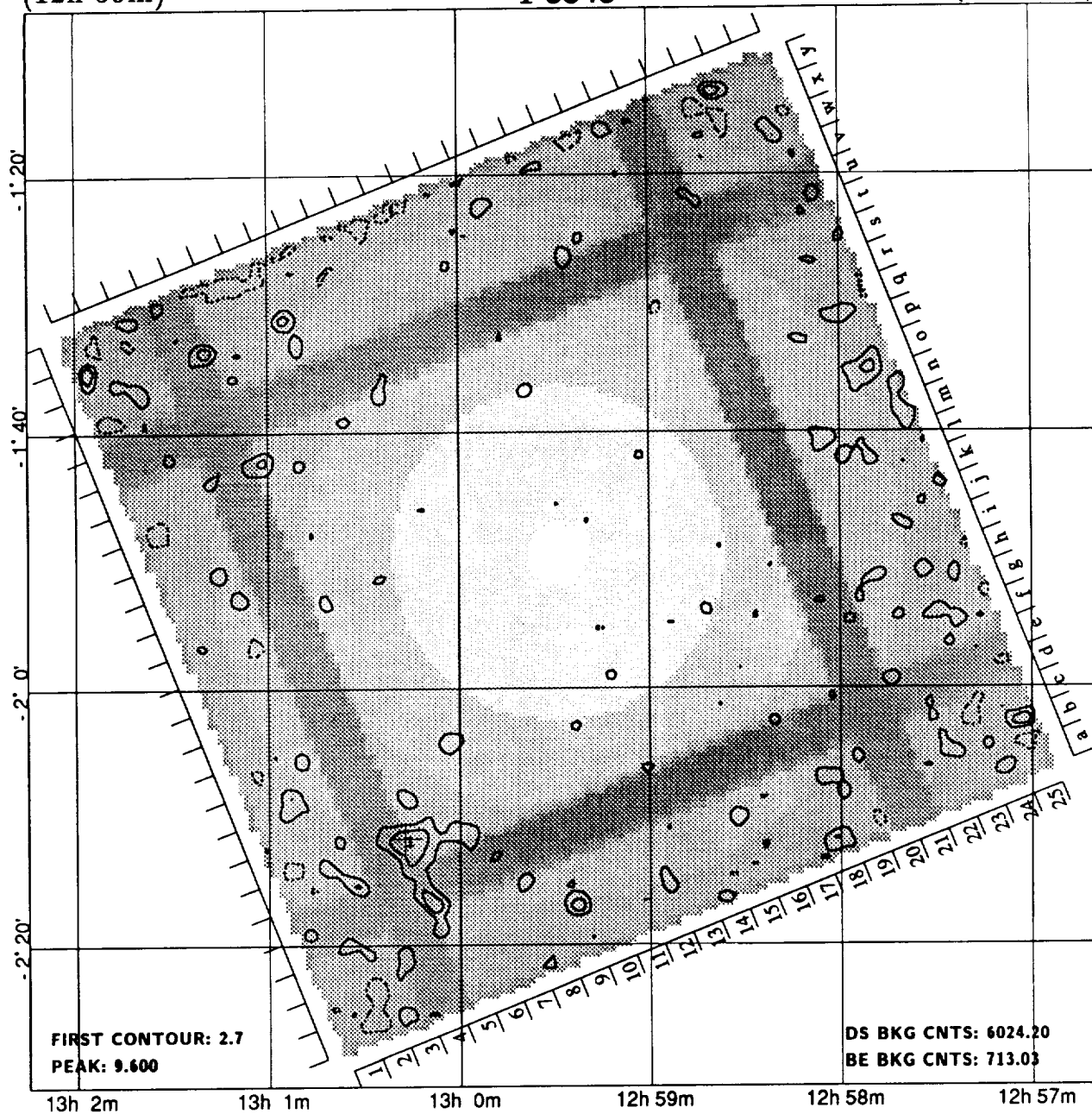
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2946	1L	12 59 09.8	28 54 21	35	0.062	0.012	42.2	9.8	4.9	1.0	0	0.7	A	CV



(12h 59m)

I 5545

(12h 59m)



FIELD CENTER:  $12^h 59^m 27.0^s$   $-01^\circ 48' 59''$  (B1950)  
 $13^h 02^m 01.3^s$   $-02^\circ 05' 07''$  (J2000)  
 $\ell$ : 308.34  $b$ : 60.68

DATE: 1980/ 19 - 1980/ 19  
 LIVETIME: 4881.6s  
 ROLL ANGLE:  $-111.7^\circ$

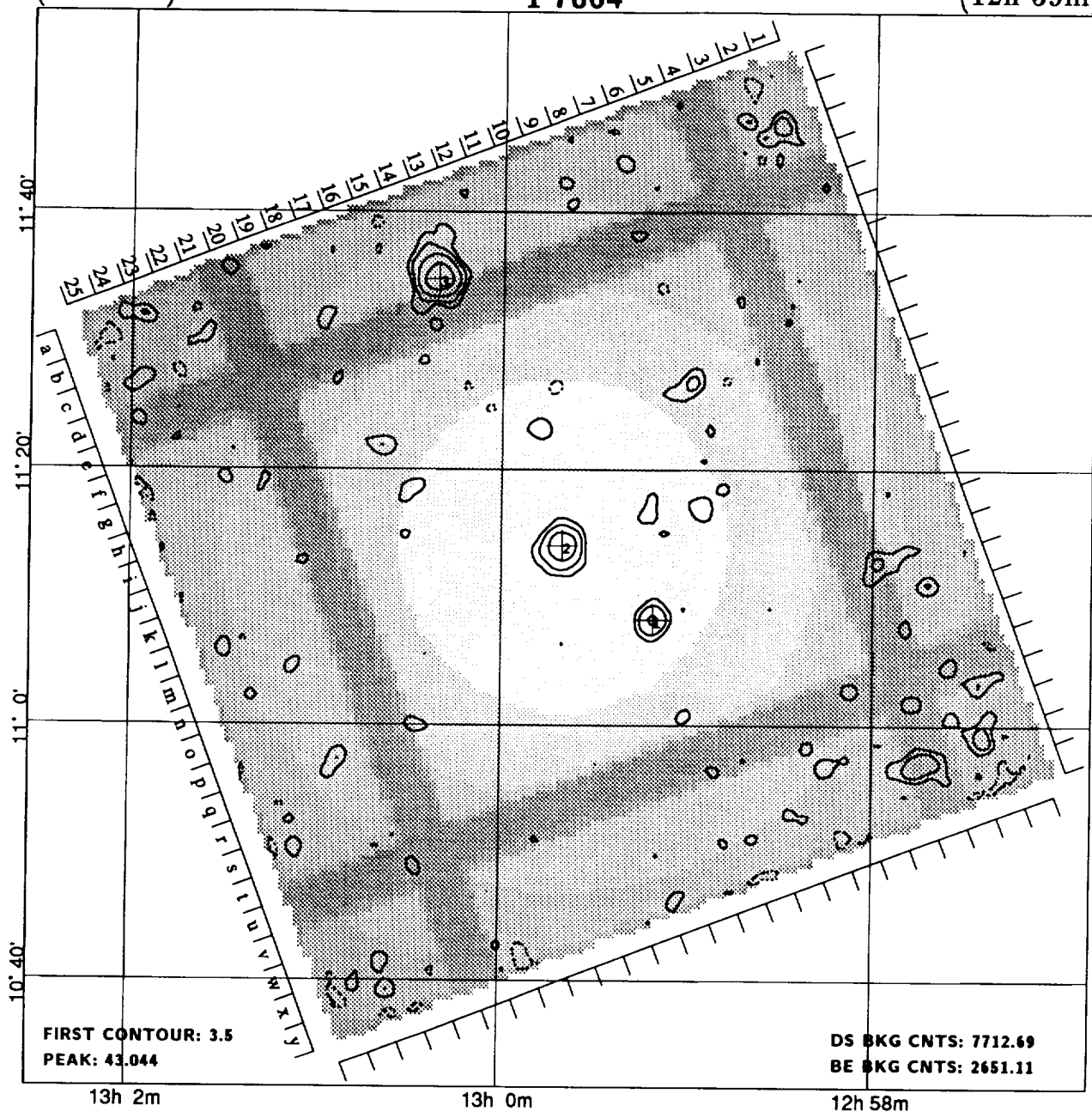
NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2953	1	13 00 17.3	-02 11 41	55	*0.0111	0.0028	23.1	9.9	4.0	2.5	1105	26.4	H	

(12h 59m)

I 7864

(12h 59m)



## EPSILON VIR, CORONAL ACTIVITY IN G STARS W/LARGE MASS LOSS

FIELD CENTER:  $12^h 59^m 41.2^s$   $11^\circ 13' 38''$  (B1950)  
 $13^h 02^m 11.5^s$   $10^\circ 57' 32''$  (J2000)  
 $l: 312.34$   $b: 73.63$

DATE: 1980/194 - 1980/194  
 LIVETIME: 6249.9s  
 ROLL ANGLE:  $69.4^\circ$

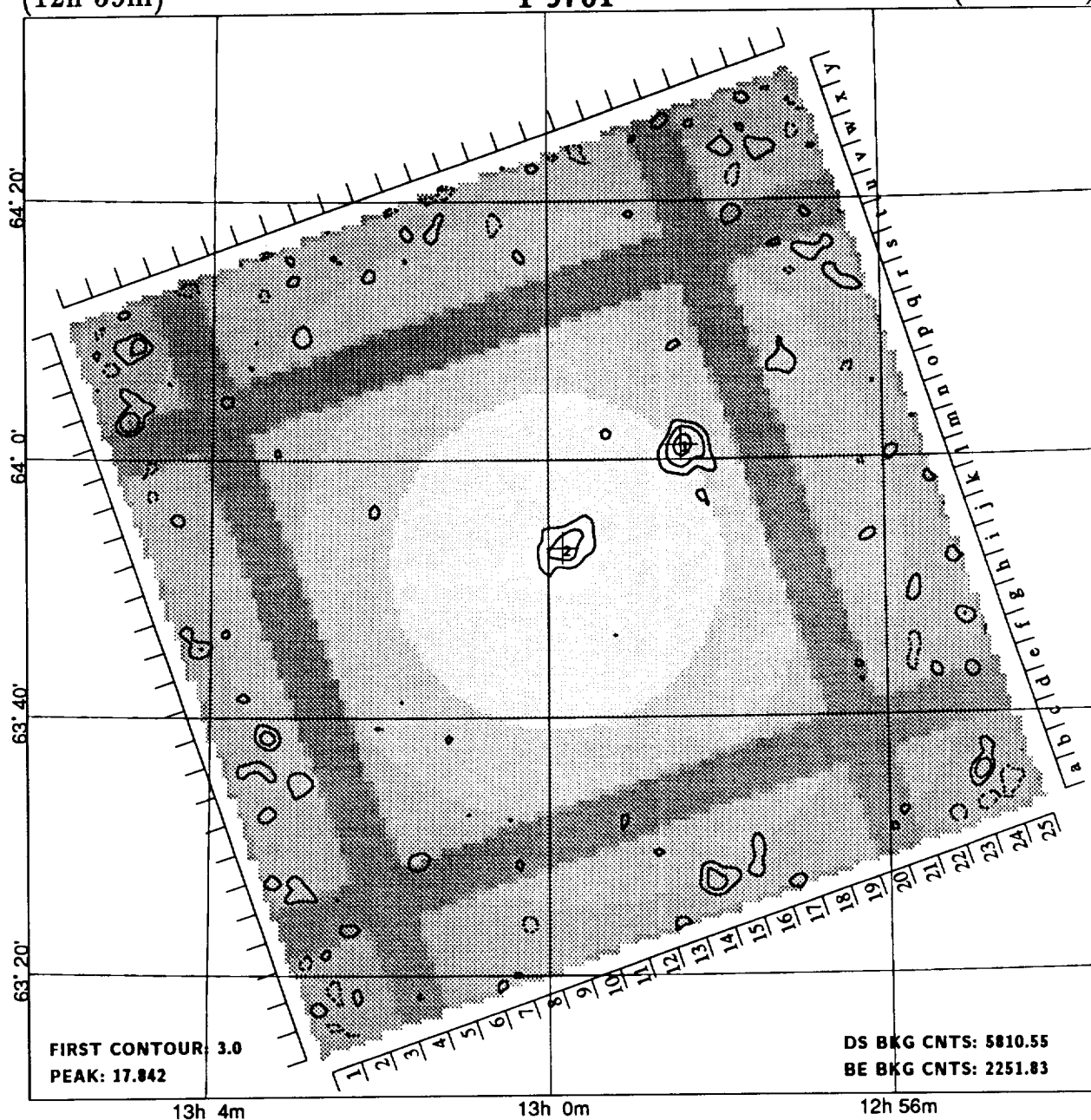
NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2947	1L	12 59 10.8	11 08 09	41	0.0139	0.0026	58.6	25.4	5.3	0.9	0	9.2	
2950	2L	12 59 40.3	11 14 00	31	0.0208	0.0030	97.0	44.0	6.8	1.2	0	0.4	
2954	3L	13 00 21.0	11 34 45	48	*0.0459	0.0064	132.4	34.1	7.0	1.4	704	23.1	

(12h 59m)

I 9701

(12h 59m)



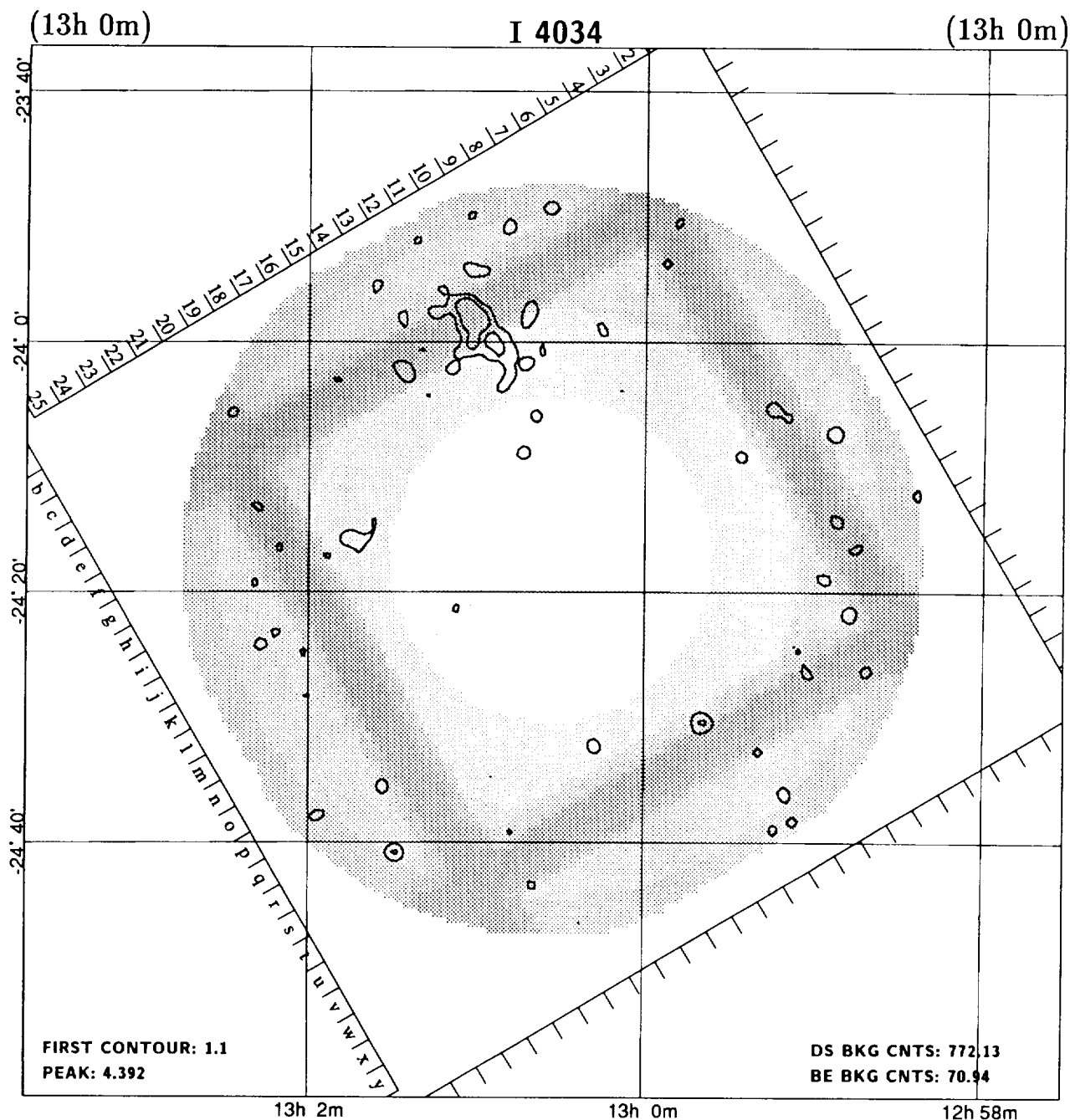
F0-G5 STARS: HR 4934

FIELD CENTER:  $12^{\text{h}}59^{\text{m}}50.0^{\text{s}}$   $63^{\circ}52'42''$  (B1950)  
 $13^{\text{h}}01^{\text{m}}48.2^{\text{s}}$   $63^{\circ}36'35''$  (J2000)  
 $l: 121.00$   $b: 53.48$

DATE: 1980/358 - 1980/359  
 LIVETIME: 4708.5s  
 ROLL ANGLE:  $-109.1^{\circ}$

NH:  $1.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2941	1	12 58 24.6	64 01 08	41	0.0181	0.0029	52.6	16.4	6.3	1.3	0	12.5	H	
2952	2	12 59 49.9	63 53 10	36	0.0137	0.0024	47.9	21.1	5.8	1.4	0	0.4	H	S



QUASAR Q 1300-243

FIELD CENTER:  $13^{\text{h}}00^{\text{m}}36.0^{\text{s}}$   $-24^{\circ}18'29''$  (B1950)  
 $13^{\text{h}}03^{\text{m}}17.8^{\text{s}}$   $-24^{\circ}34'35''$  (J2000)  
 $l$ : 306.36  $b$ : 38.22

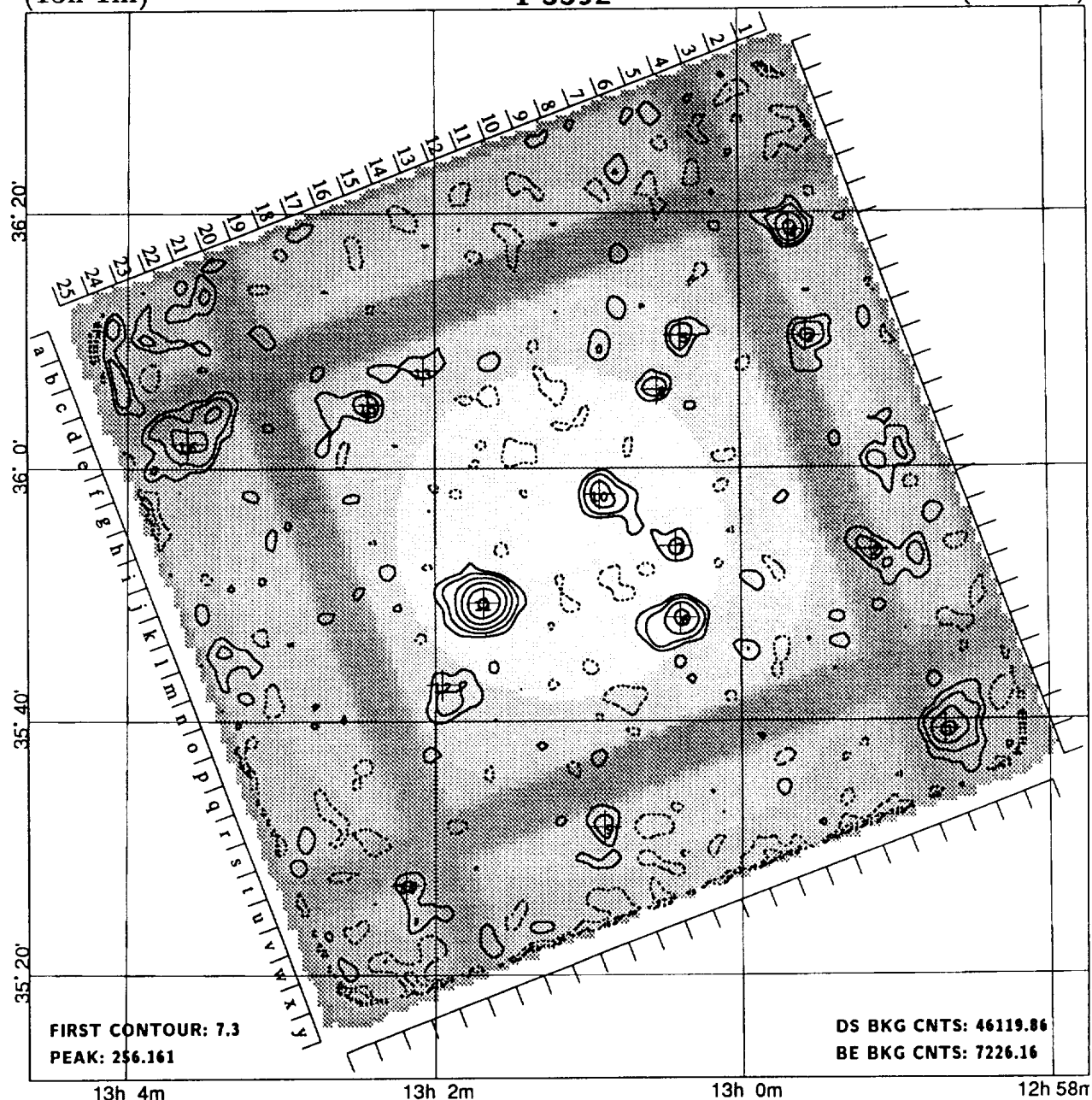
DATE: 1979/210 - 1979/210  
 LIVETIME: 625.7s  
 ROLL ANGLE:  $59.5^{\circ}$

NH:  $0.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 1m)

I 5392

(13h 1m)



## SURVEY OF DEEP BRACCESI FIELD

FIELD CENTER:  $13^h 01^m 11.7^s$   $35^\circ 53' 59''$  (B1950)  
 $13^h 03^m 32.5^s$   $35^\circ 37' 54''$  (J2000)  
 $l: 106.81$   $b: 81.11$

DATE: 1980/183 - 1980/186  
 LIVETIME: 38714.4s  
 ROLL ANGLE:  $69.2^\circ$

NH:  $1.1E+20$   
 REF/ID: Q  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2942	1	12 58 40.8	35 39 16	50	*0.0103	0.0012	113.2	62.8	8.5	1.7	1008	34.2	AH
2945	2	12 59 09.0	35 53 30	65	*0.00271	0.00064	45.9	71.1	4.2	1.9	1109	24.9	A
2948	3	12 59 34.2	36 10 20	50	*0.00438	0.00077	72.9	93.1	5.7	1.1	804	25.6	A
2951	4	12 59 40.5	36 18 37	48	0.0090	0.0011	121.9	88.1	8.4	1.0	300	30.7	H
2955	5	13 00 23.4	36 10 23	51	0.00344	0.00063	71.7	100.3	5.5	0.8	0	19.1	
2956	6	13 00 23.8	35 48 14	38	0.01081	0.00080	270.6	126.4	13.6	1.4	0	11.3	H
2957	7	13 00 25.6	35 53 50	41	0.00247	0.00053	64.6	128.4	4.6	0.8	0	9.2	H
2958	8	13 00 32.6	36 06 07	41	0.00320	0.00059	75.9	119.1	5.4	0.7	0	14.3	H
2959	9	13 00 53.8	35 31 42	61	*0.00295	0.00065	52.3	80.7	4.5	0.8	601	22.3	H
2960	10	13 00 55.4	35 57 56	38	0.00658	0.00065	183.2	142.8	10.1	1.3	0	5.3	H

Source Table cont.

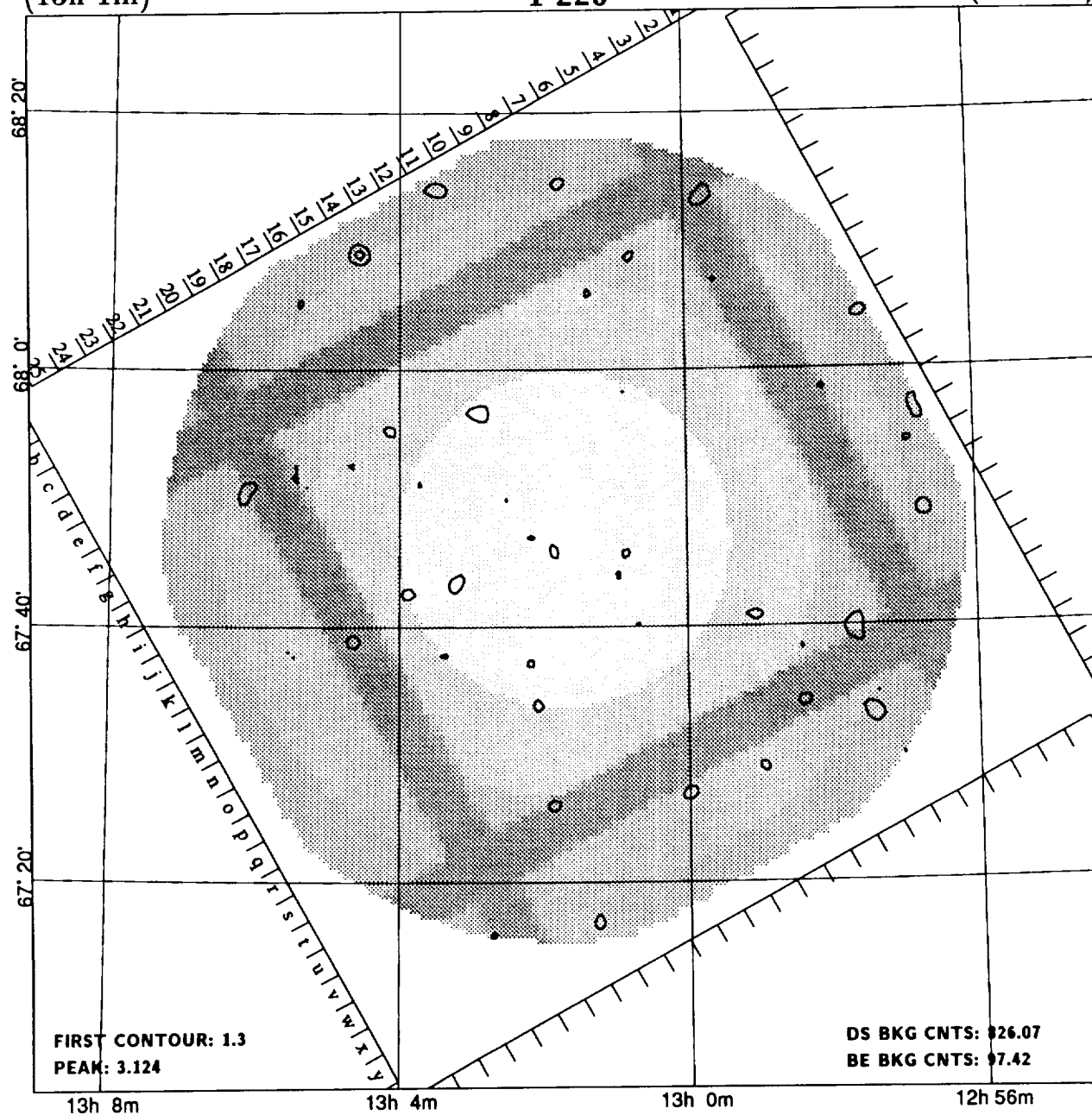
# I 5392 cont.

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2961	11	13 01 41.1	35 49 24	37	0.0382	0.0013	1013.9	128.1	30.0	1.3	0	7.4	H	
2962	12	13 01 57.3	35 42 52	54	0.00202	0.00054	46.1	102.9	3.8	1.4	0	14.9	H	
2963	13	13 02 04.7	36 07 37	58	0.00192	0.00055	41.8	100.2	3.5	1.2	100	17.5	H	
2964	14	13 02 11.4	35 27 04	51	*0.00243	0.00066	32.4	44.6	3.7	1.7	1307	28.9	H	
2965	15	13 02 26.4	36 04 54	50	0.00340	0.00063	70.6	99.4	5.4	1.3	0	18.9	H	
2969	16	13 03 36.8	36 01 57	55	0.00686	0.00096	91.1	69.9	7.2	3.2	500	29.3	H	

(13h 1m)

I 220

(13h 1m)



A 1674 CLUSTER EVOLUTION

FIELD CENTER:  $13^h 01^m 42.0^s$   $67^\circ 45' 59''$  (B1950)  
 $13^h 03^m 31.9^s$   $67^\circ 29' 54''$  (J2000)  
 $l: 121.15$   $b: 49.59$

DATE: 1979/166 - 1979/166  
LIVETIME: 669.4s  
ROLL ANGLE:  $61.2^\circ$

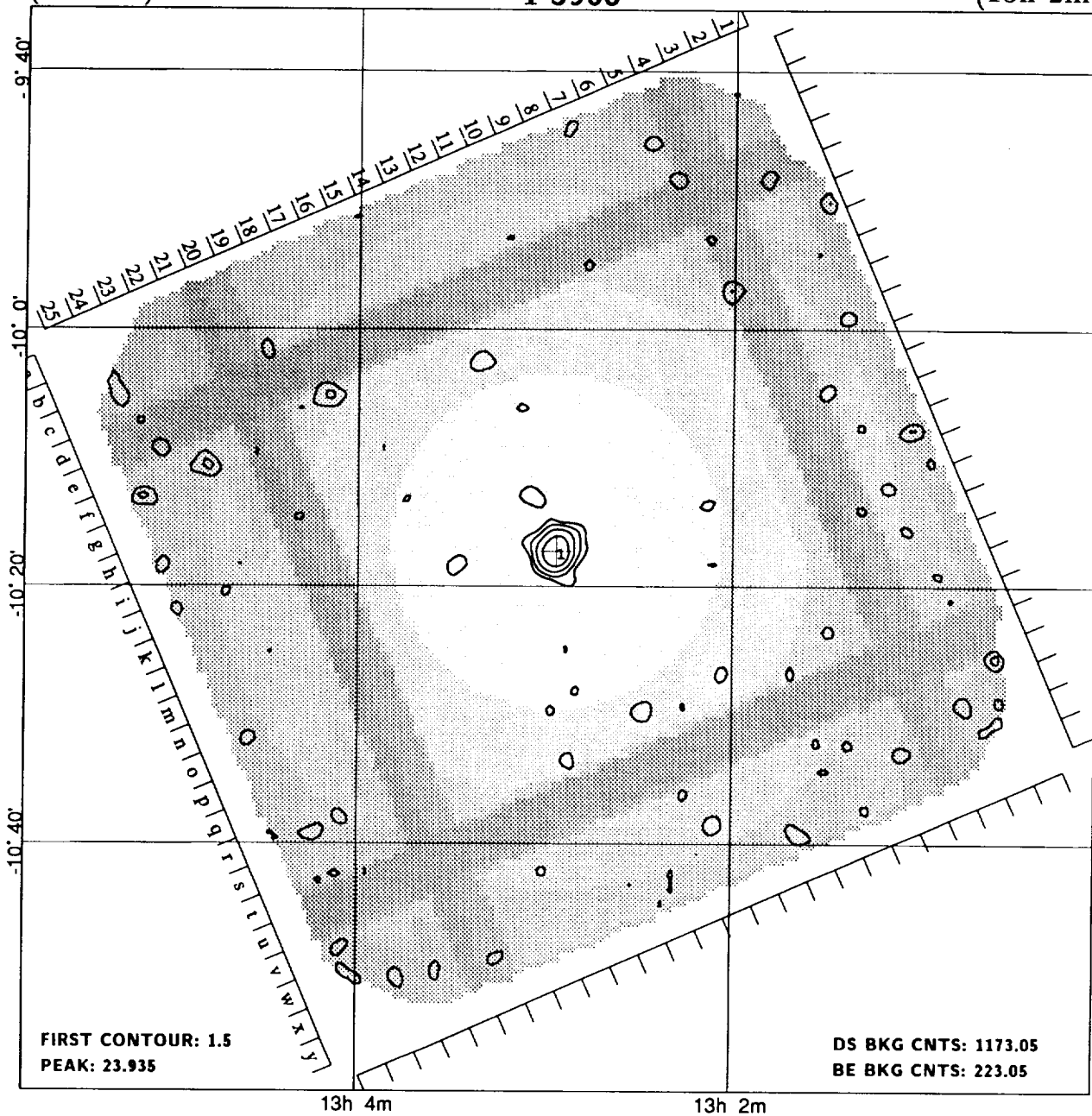
NH:  $1.9E+20$   
REF/ID:  
FIELD FLAGS:



(13h 2m)

I 3968

(13h 2m)



FIELD CENTER:  $13^h 02^m 55.8^s$   $-10^\circ 17' 16''$  (B1950)  
 $13^h 05^m 32.9^s$   $-10^\circ 33' 20''$  (J2000)  
 $l: 308.59$   $b: 52.16$

DATE: 1979/205 - 1979/206  
 LIVETIME: 950.6s  
 ROLL ANGLE:  $66.6^\circ$

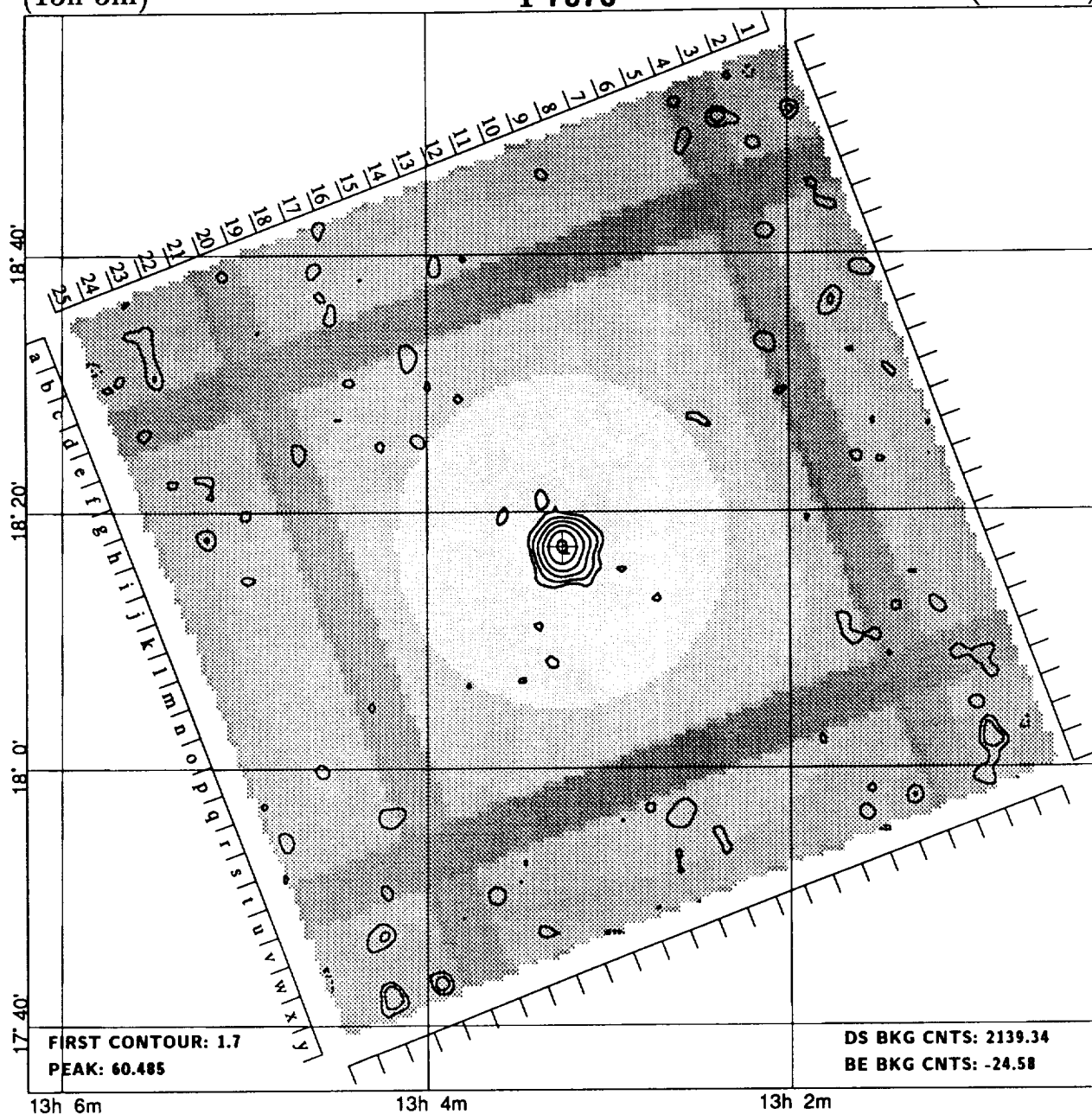
NH:  $3.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2966	1	13 02 56.3	-10 17 17	31	0.136	0.014	96.5	3.5	9.6	1.2	0	0.2	H	Q

(13h 3m)

I 7878

(13h 3m)



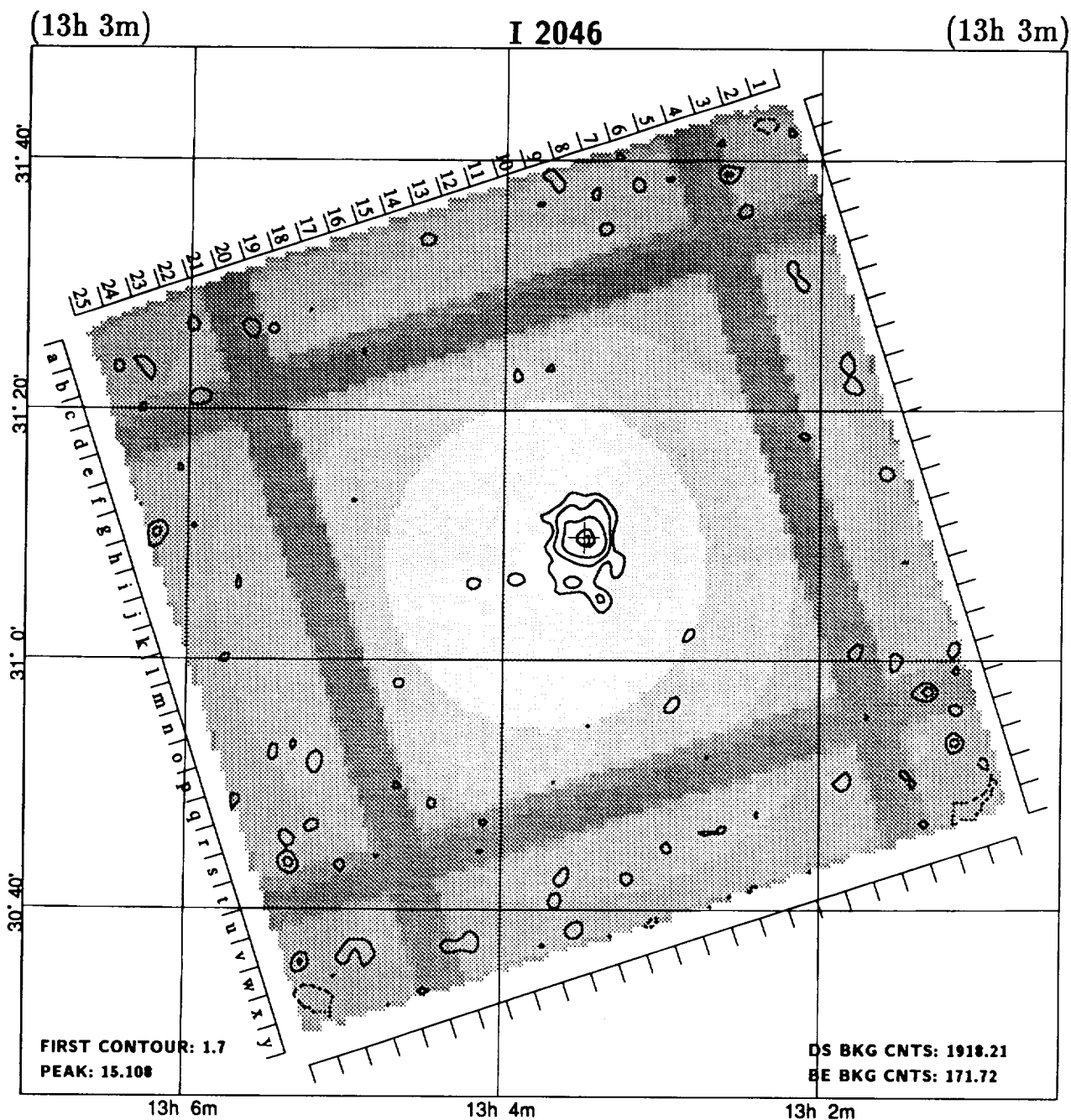
## GP COM, ORBITAL MODULATIONS IN CATAclysmic VARIABLES

FIELD CENTER:  $13^h 03^m 15.0^s$   $18^\circ 16' 59''$  (B1950)  
 $13^h 05^m 42.6^s$   $18^\circ 00' 57''$  (J2000)  
 $\ell$ : 323.52  $b$ : 80.31

DATE: 1980/190 - 1980/190  
 LIVETIME: 1733.6s  
 ROLL ANGLE:  $69.0^\circ$

NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2967	1	13 03 15.3	18 17 17	31	0.189	0.012	244.0	5.0	15.5	1.3	0	0.4	H	



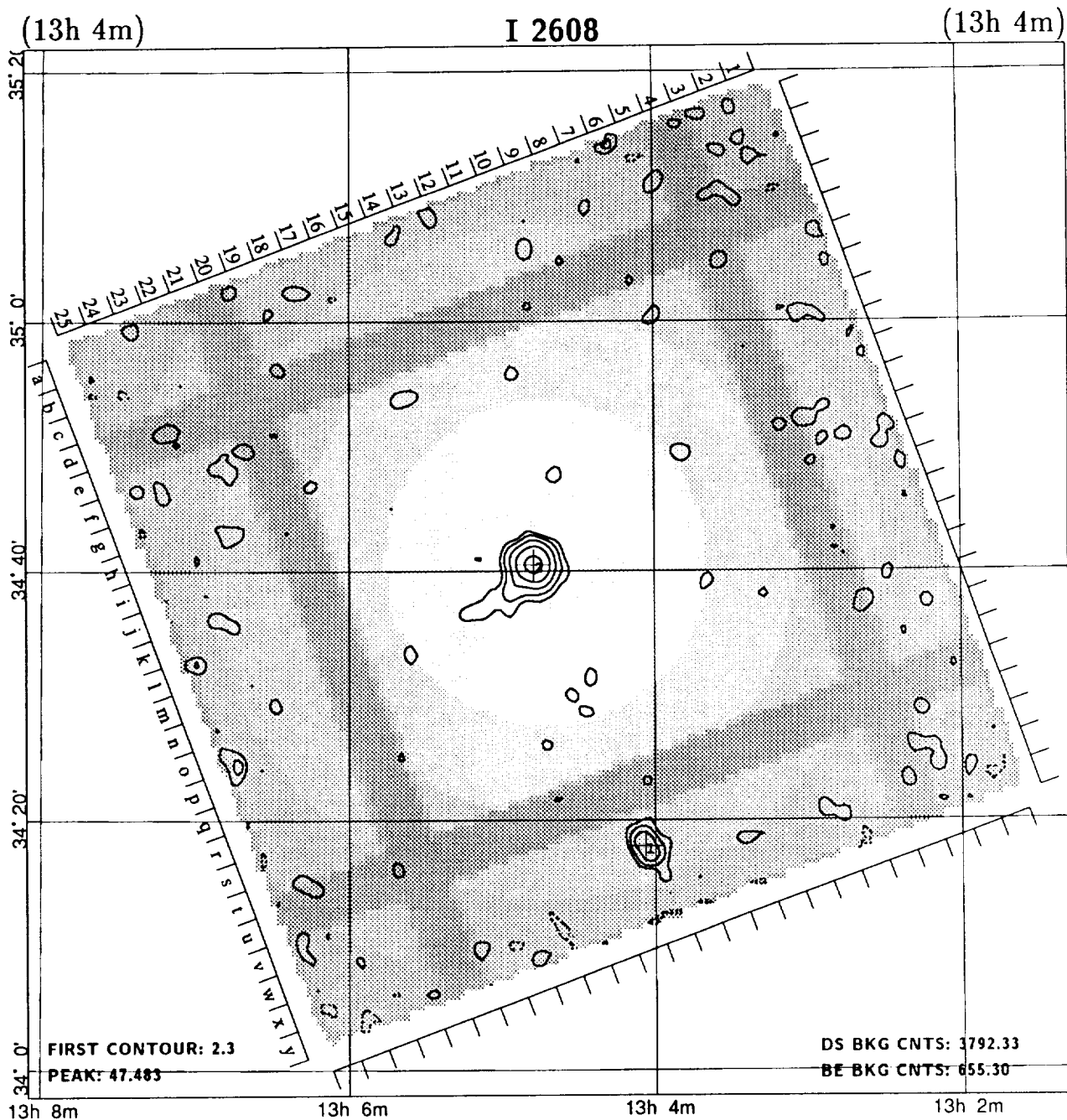
X-RAY STUDY OF QUASARS: B264

FIELD CENTER:  $13^h 03^m 45.1^s$   $31^\circ 07' 00''$  (B1950)  
 $13^h 06^m 07.6^s$   $30^\circ 50' 58''$  (J2000)  
 $l: 83.01$   $b: 85.08$

DATE: 1979/191 - 1979/191  
 LIVETIME: 1554.4s  
 ROLL ANGLE:  $71.9^\circ$

NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2968	1	13 03 29.3	31 09 54	34	0.0652	0.0079	73.3	5.7	8.3	2.4	0	4.3	H	CLG

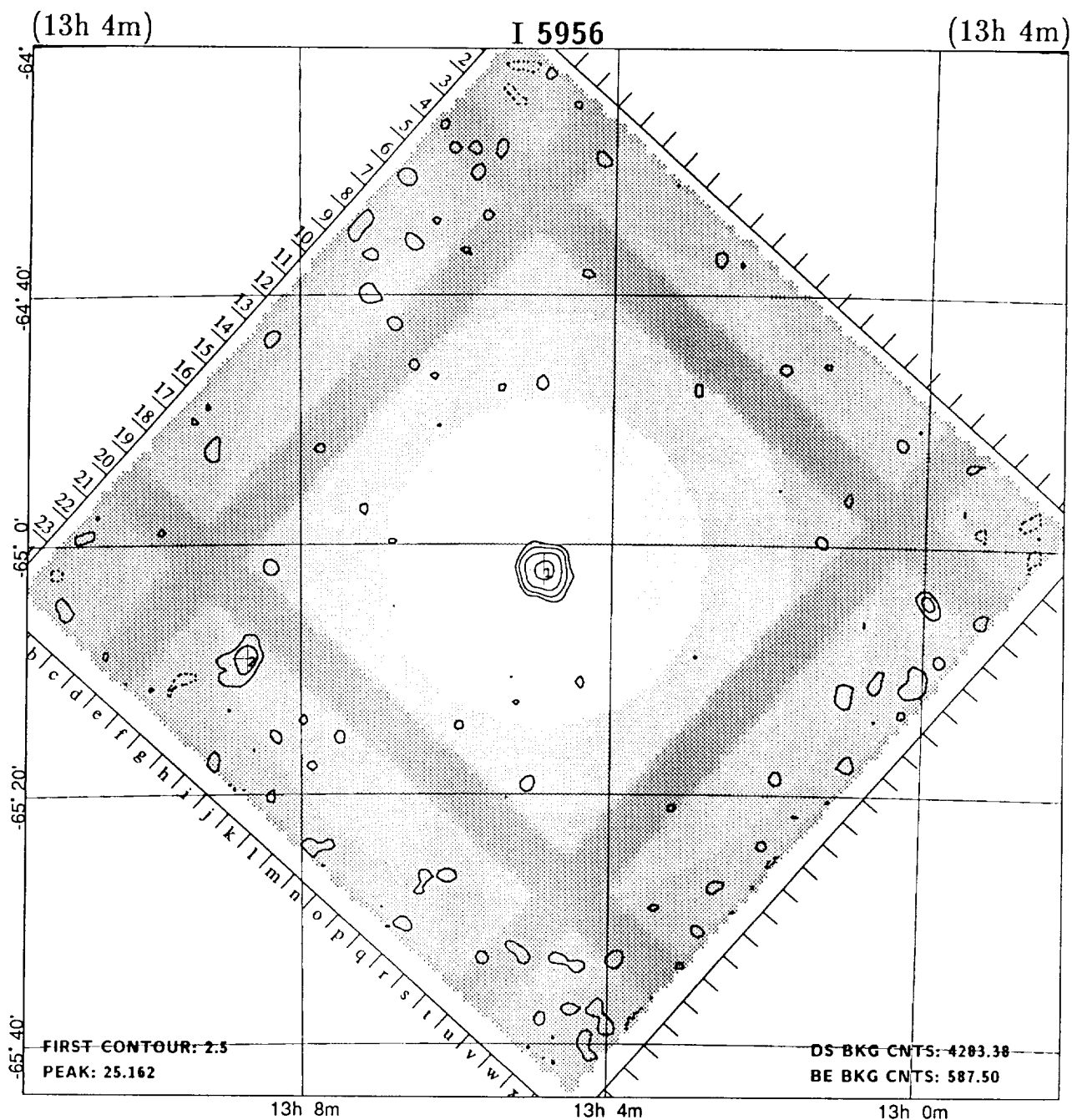


FIELD CENTER:  $13^{\text{h}}04^{\text{m}}42.0^{\text{s}}$   $34^{\circ}39'59''$  (B1950)  
 $13^{\text{h}}07^{\text{m}}02.7^{\text{s}}$   $34^{\circ}23'58''$  (J2000)  
 $l: 99.16$   $b: 81.99$

DATE: 1980/186 - 1980/186  
 LIVETIME: 3183.4s  
 ROLL ANGLE:  $69.7^{\circ}$

NH:  $1.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2970	1	13 04 03.8	34 17 54	50	0.0307	0.0051	43.4	8.6	6.0	1.0	0	23.4	H	AGN
2971	2	13 04 47.5	34 40 29	31	0.0903	0.0064	213.6	12.4	14.2	1.4	0	1.3	H	



Wolf-Rayet Star Survey: 113904 (THETA MUS)

FIELD CENTER:  $13^{\text{h}}04^{\text{m}}52.0^{\text{s}}$   $-65^{\circ}02'20''$  (B1950)  
 $13^{\text{h}}08^{\text{m}}07.0^{\text{s}}$   $-65^{\circ}18'21''$  (J2000)  
 $\ell$ : 304.67  $b$ : -2.49

DATE: 1980/238 - 1980/238  
 LIVETIME: 3471.0s  
 ROLL ANGLE:  $41.6^{\circ}$

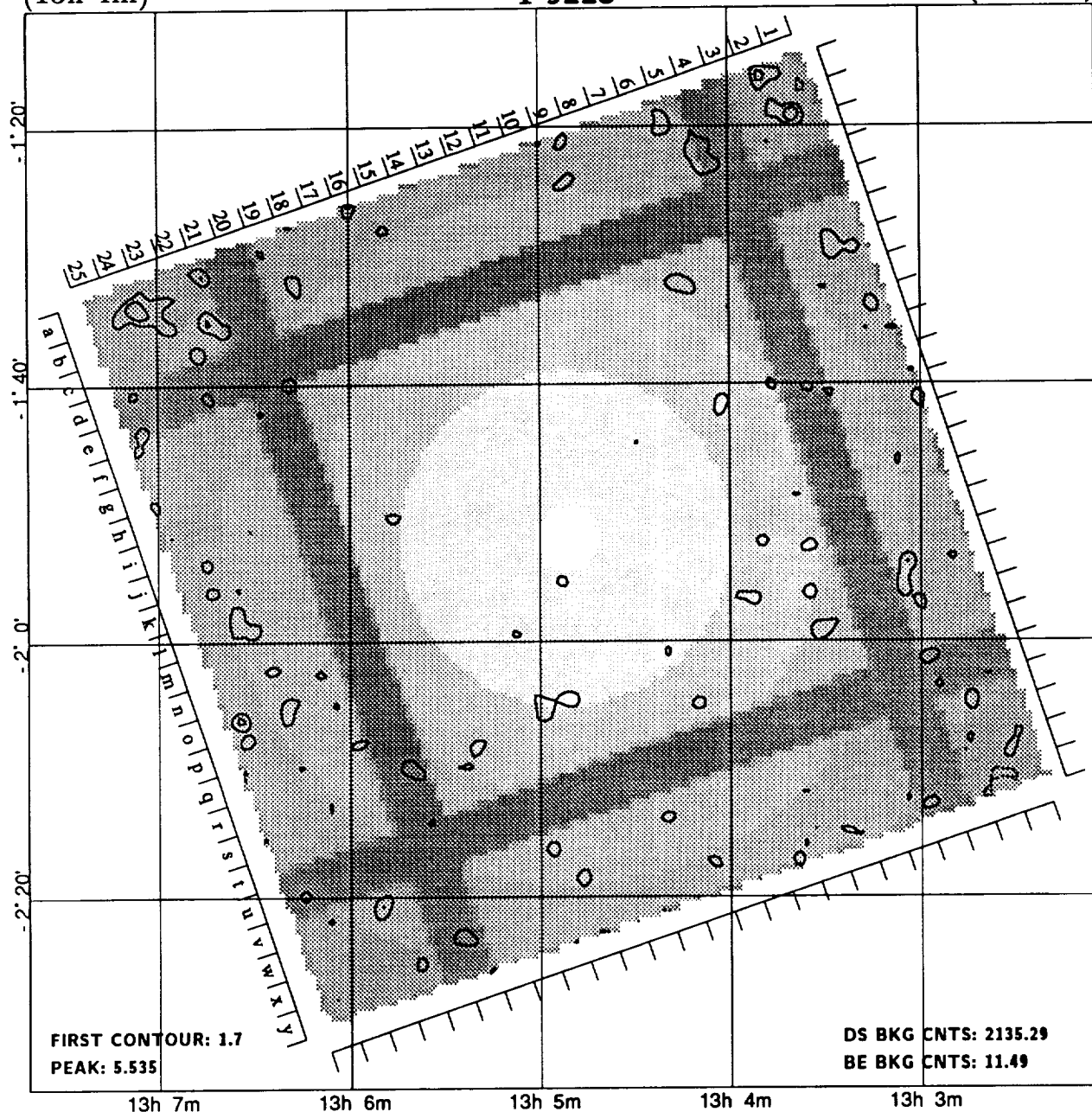
NH:  $1.5\text{E}+21$   
 REF/ID: S  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2972	1	13 04 52.2	-65 02 02	31	0.0489	0.0046	126.5	12.5	10.7	1.3	0	0.4	H S	
2983	2	13 08 41.3	-65 09 04	55	*0.0121	0.0033	17.8	6.2	3.6	1.2	401	25.0	H	

(13h 4m)

I 9225

(13h 4m)



UNIDENTIFIED 3A SOURCES: 3A 1306-012

FIELD CENTER:  $13^h 04^m 52.8^s$   $-01^\circ 52' 47''$  (B1950)  
 $13^h 07^m 27.2^s$   $-02^\circ 08' 48''$  (J2000)  
 $l: 311.07$   $b: 60.47$

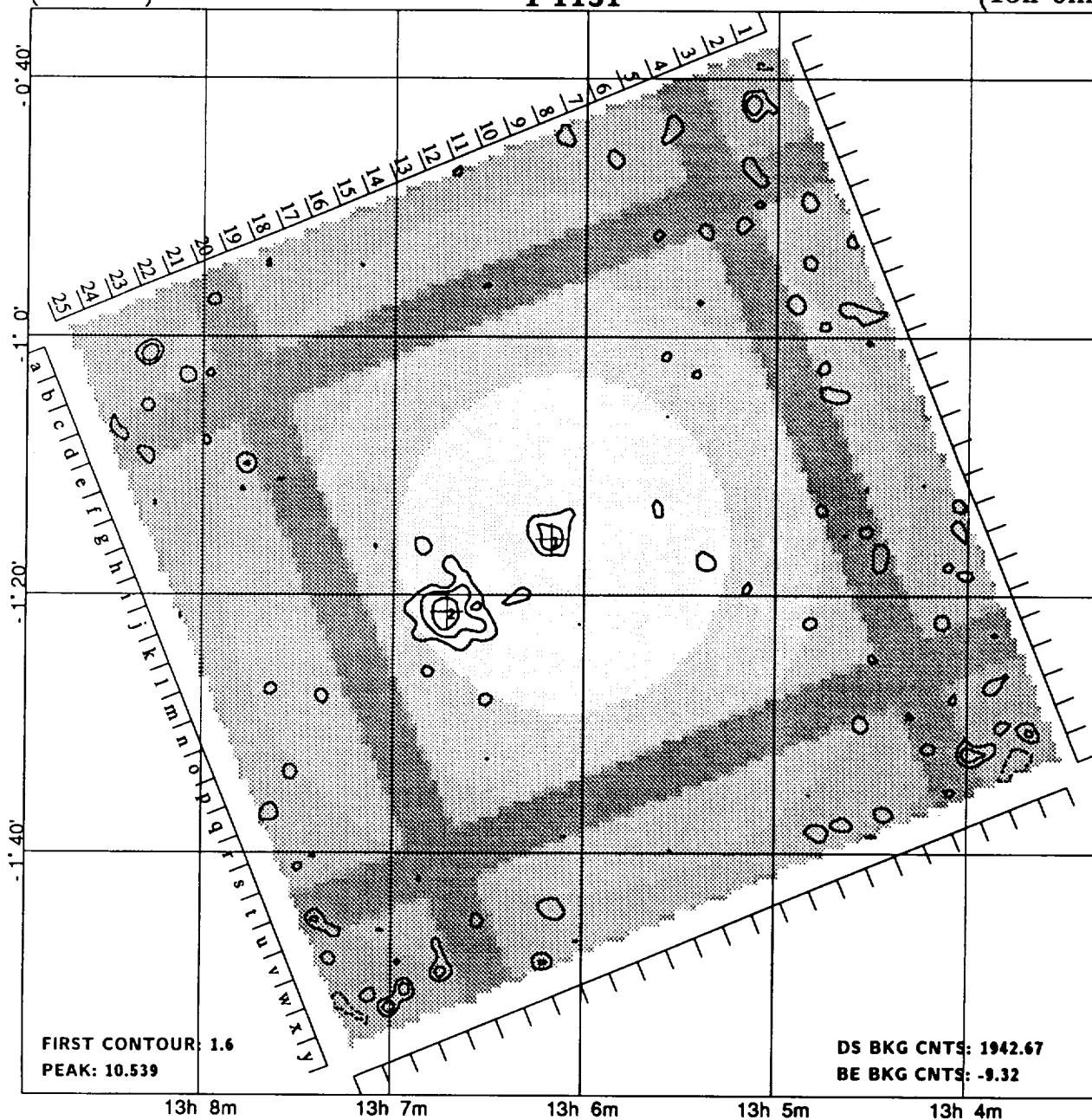
DATE: 1980/198 - 1980/198  
 LIVETIME: 1730.3s  
 ROLL ANGLE:  $71.4^\circ$

NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 6m)

I 1131

(13h 6m)



FIELD CENTER:  $13^{\text{h}}06^{\text{m}}07.2^{\text{s}}$   $-01^{\circ}16'47''$  (B1950)  
 $13^{\text{h}}08^{\text{m}}41.4^{\text{s}}$   $-01^{\circ}32'47''$  (J2000)  
 $l: 311.86$   $b: 61.03$

DATE: 1980/194 - 1980/194  
 LIVETIME: 1574.2s  
 ROLL ANGLE:  $67.9^{\circ}$

NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

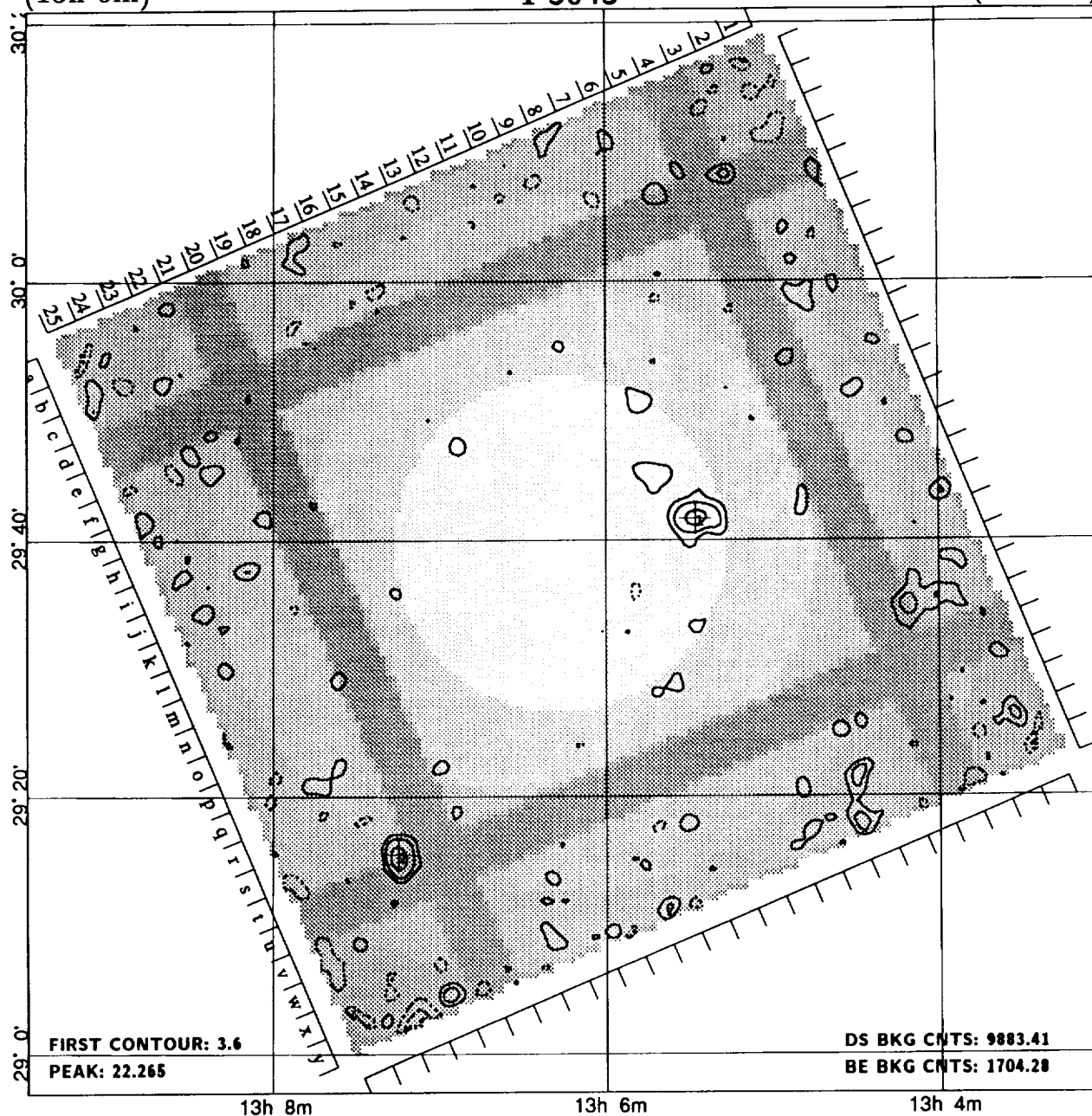
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
2974	1	13 06 10.4	-01 15 42	37	0.0185	0.0044	21.7	5.3	4.2	1.1	0	1.5	H
2975	2	13 06 43.2	-01 21 17	41	0.0415	0.0066	43.0	4.0	6.3	1.9	0	10.2	AH



(13h 6m)

I 3045

(13h 6m)



## NORTH GALACTIC POLE, SELECTED AREA 57

FIELD CENTER:  $13^{\text{h}}06^{\text{m}}15.1^{\text{s}}$   $29^{\circ}39'03''$  (B1950)  
 $13^{\text{h}}08^{\text{m}}37.9^{\text{s}}$   $29^{\circ}23'04''$  (J2000)  
 $l: 64.73$   $b: 85.59$

DATE: 1979/183 - 1979/183  
 LIVETIME: 8008.8s  
 ROLL ANGLE:  $67.1^{\circ}$

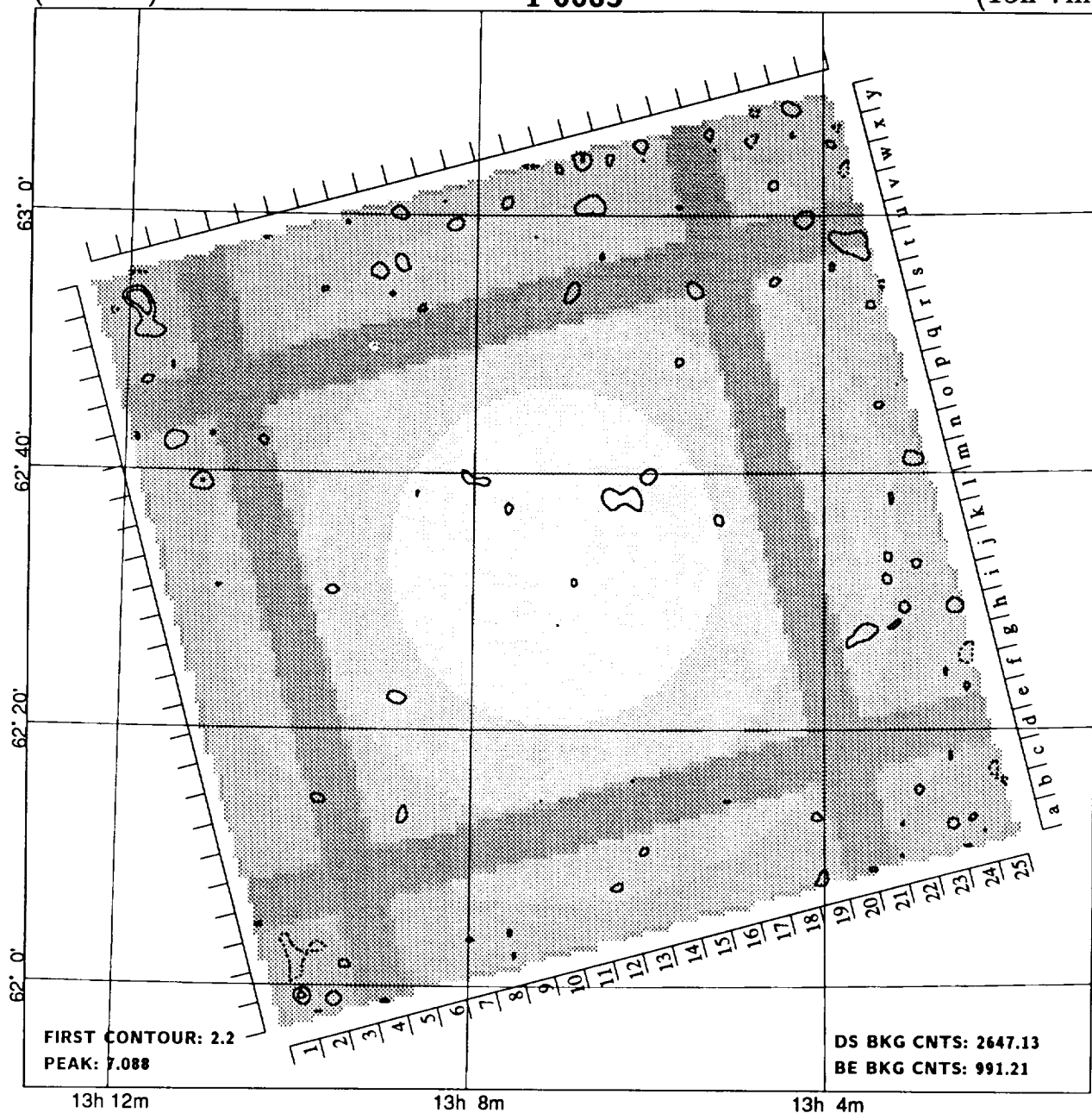
NH:  $1.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2973	1	13 05 27.6	29 41 40	41	0.0124	0.0018	65.2	22.8	7.0	1.2	0	10.6	H	GLB
2977	2	13 07 15.0	29 15 32	51	*0.0130	0.0024	41.2	15.8	5.5	0.9	1206	26.9	H	

(13h 7m)

I 6683

(13h 7m)



GROUPS OF GALAXIES: TG 66

FIELD CENTER:  $13^{\text{h}}07^{\text{m}}00.0^{\text{s}}$   $62^{\circ}33'59''$  (B1950)  
 $13^{\text{h}}08^{\text{m}}56.3^{\text{s}}$   $62^{\circ}18'01''$  (J2000)  
 $l$ : 119.41  $b$ : 54.71

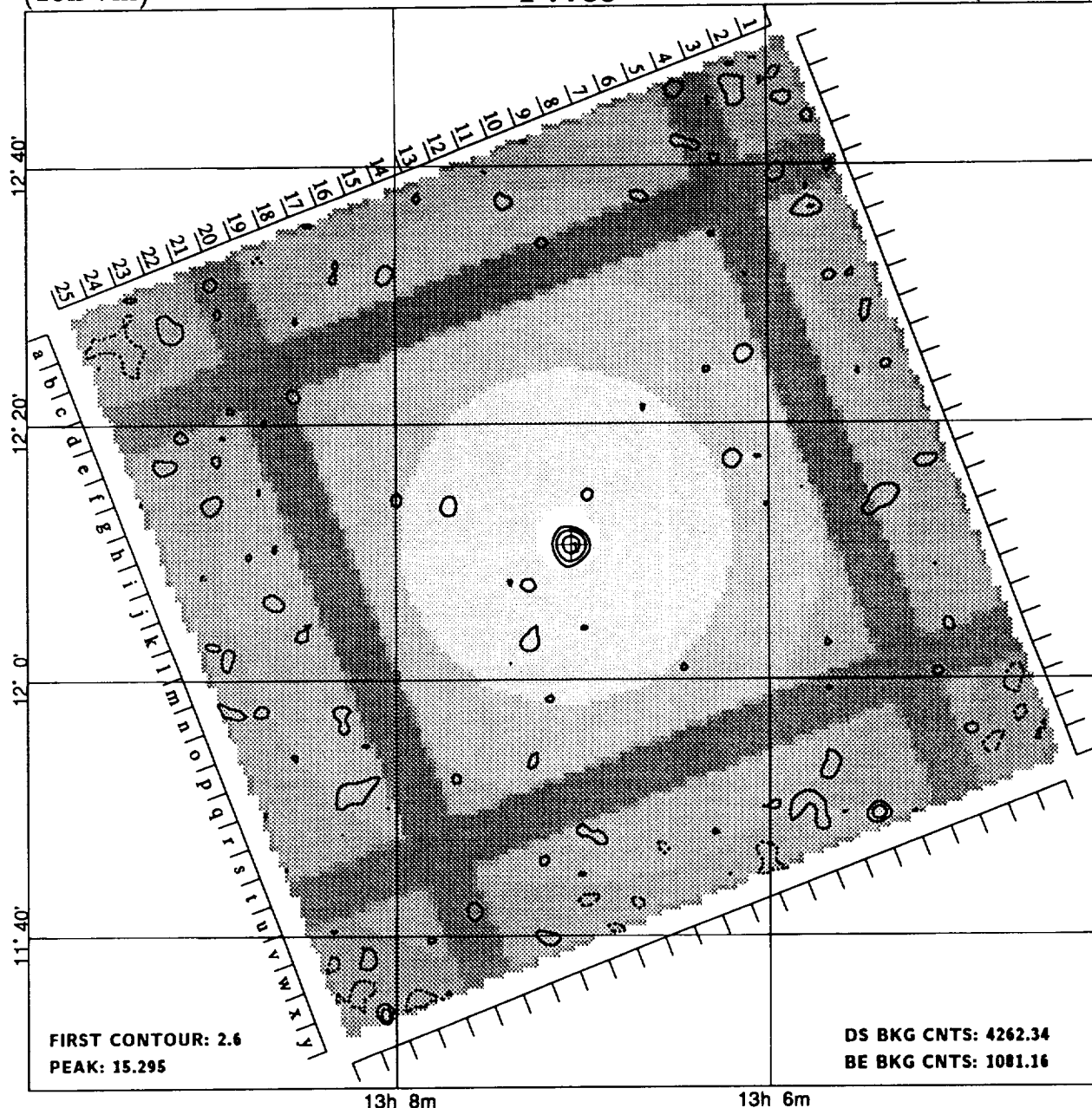
DATE: 1980/358 - 1980/358  
 LIVETIME: 2145.1s  
 ROLL ANGLE:  $-104.9^{\circ}$

NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 7m)

I 7735

(13h 7m)



## 4C12.46, FAINT BL LAC OBJECTS

FIELD CENTER:  $13^{\text{h}}07^{\text{m}}06.0^{\text{s}}$   $12^{\circ}10'20''$  (B1950)  
 $13^{\text{h}}09^{\text{m}}35.5^{\text{s}}$   $11^{\circ}54'23''$  (J2000)  
 $l: 319.45$   $b: 74.19$

DATE: 1980/193 - 1980/193  
 LIVETIME: 3453.9s  
 ROLL ANGLE:  $68.9^{\circ}$

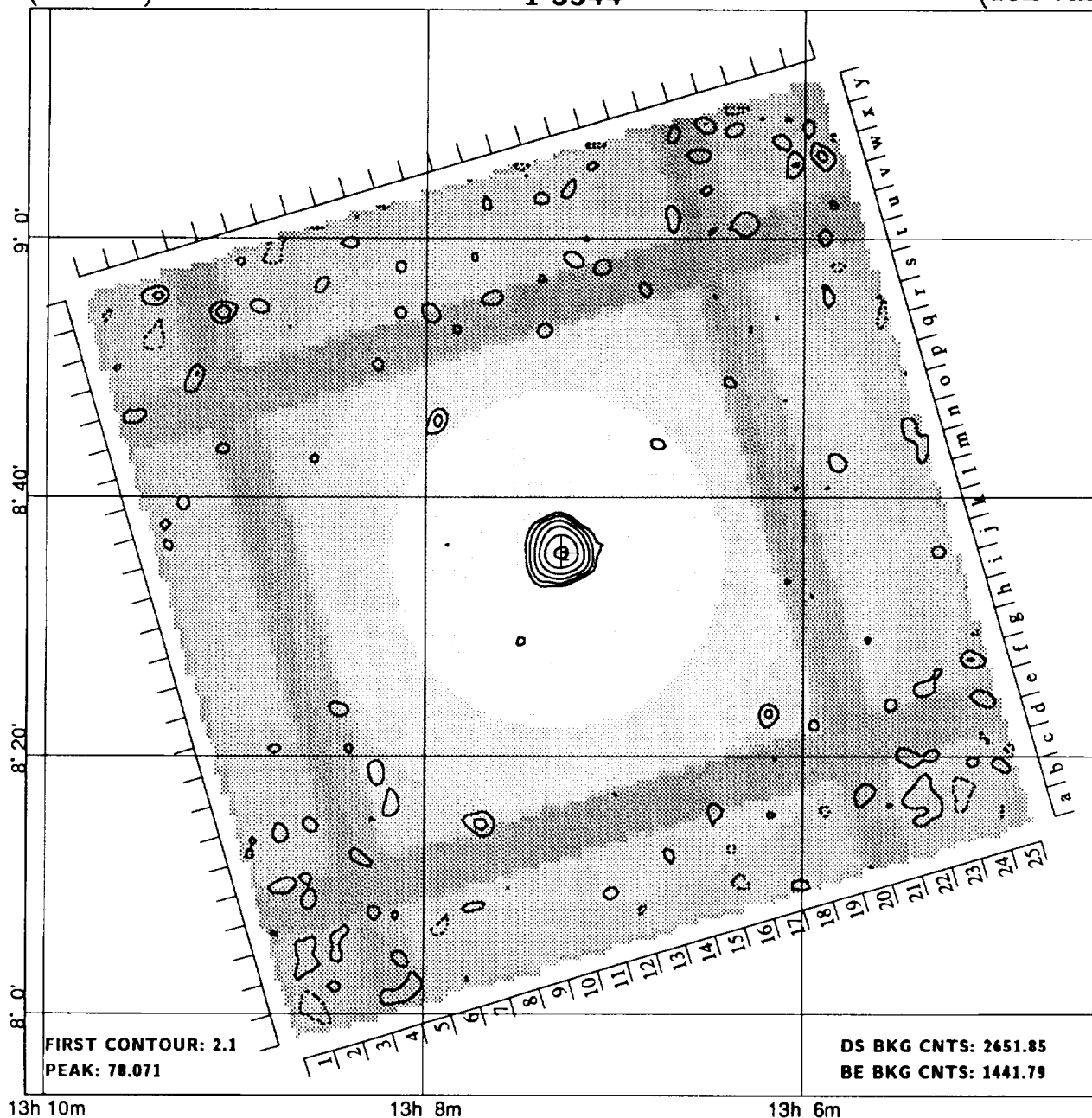
NH:  $2.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2976	1	13 07 03.6	12 10 34	35	0.0217	0.0032	55.9	13.1	6.7	0.8	0	0.8	H	

(13h 7m)

I 5344

(13h 7m)



## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $13^{\text{h}}07^{\text{m}}16.3^{\text{s}}$   $08^{\circ}35'41''$  (B1950)  
 $13^{\text{h}}09^{\text{m}}47.1^{\text{s}}$   $08^{\circ}19'44''$  (J2000)  
 $l: 316.79$   $b: 70.71$

DATE: 1981/ 27 - 1981/ 27

NH:  $2.1\text{E}+20$ 

LIVETIME: 2148.9s

REF/ID:

ROLL ANGLE:  $-106.4^{\circ}$ 

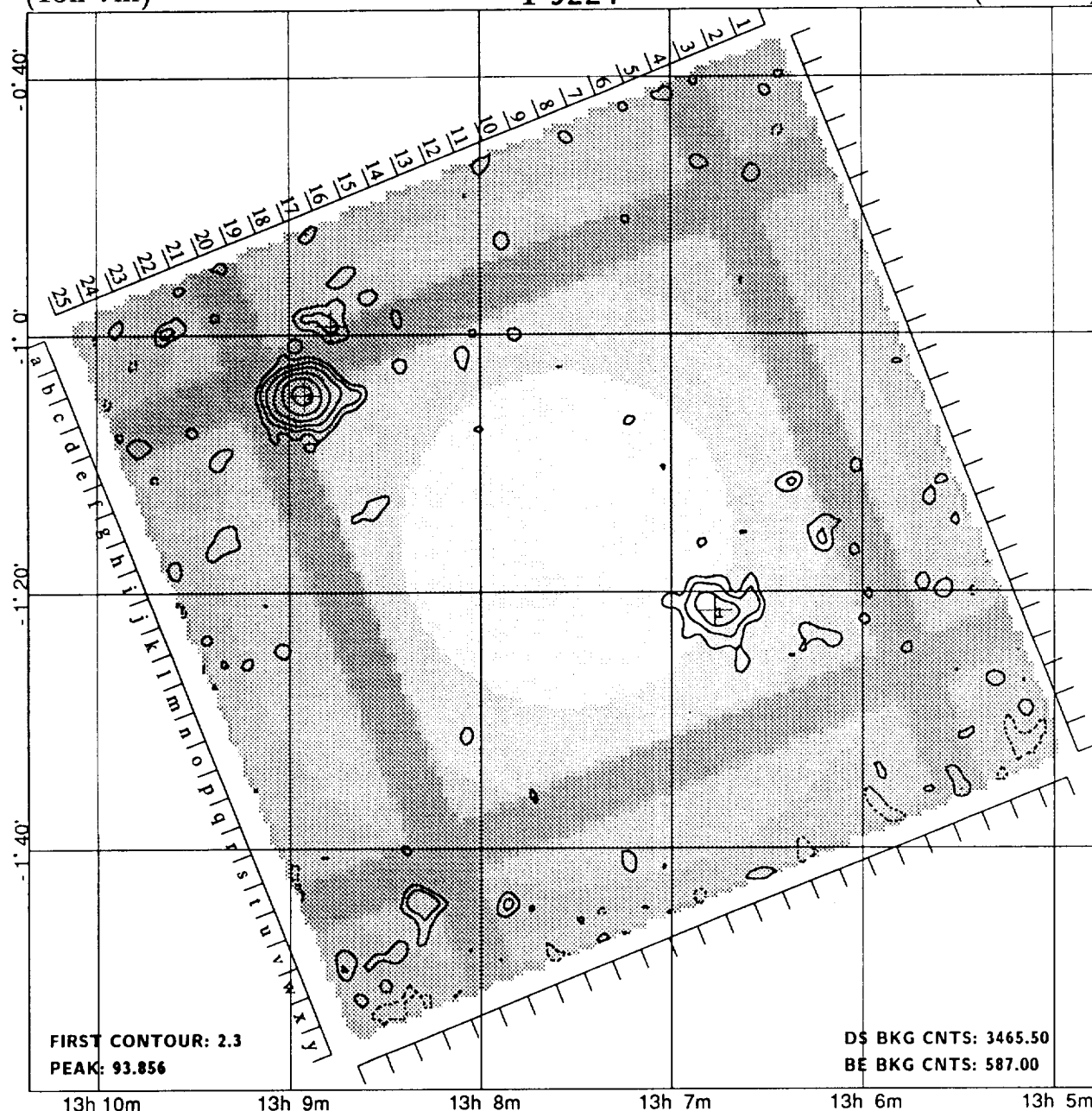
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2978	1L	13 07 16.8	08 35 40	31	0.172	0.014	275.5	74.5	12.6	1.3	0	0.3		Q

(13h 7m)

I 9224

(13h 7m)



UNIDENTIFIED 3A SOURCES: 3A 1306-012

FIELD CENTER:  $13^h 07^m 33.6^s$   $-01^\circ 16' 47''$  (B1950)  
 $13^h 10^m 07.8^s$   $-01^\circ 32' 45''$  (J2000)  
 $\ell$ : 312.59  $b$ : 60.97

DATE: 1980/198 - 1980/198

NH:  $1.8E+20$ 

LIVETIME: 2808.2s

REF/ID:

ROLL ANGLE:  $68.2^\circ$ 

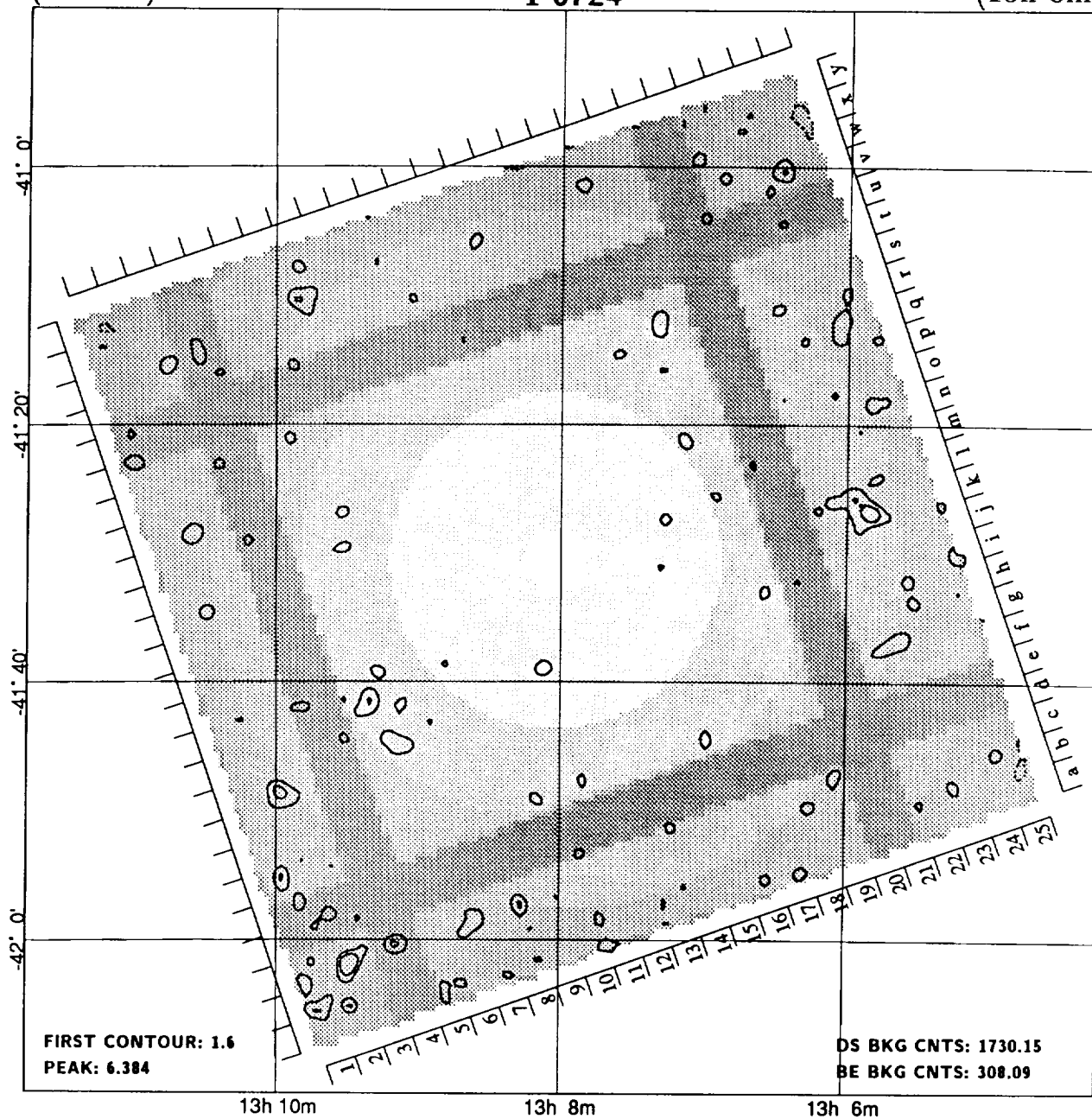
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2975	1	13 06 46.2	-01 21 29	41	0.0341	0.0047	60.1	8.9	7.2	2.0	0	12.8	AH	
2984	2	13 08 46.9	-00 59 21	61	*0.0138	0.0039	16.6	5.4	3.5	1.1	805	25.7	AH	
2986	3	13 08 55.2	-01 04 43	47	*0.212	0.013	270.5	5.5	16.3	1.6	1106	23.9	AH	CLG

(13h 8m)

I 6724

(13h 8m)



## EXTENDED EMISSION FROM CEN-A RADIO LOBES, POS 4

FIELD CENTER:  $13^{\text{h}}08^{\text{m}}00.0^{\text{s}}$   $-41^{\circ}29'59''$  (B1950)  
 $13^{\text{h}}10^{\text{m}}51.4^{\text{s}}$   $-41^{\circ}45'56''$  (J2000)  
 $\ell$ : 306.81  $b$ : 20.96

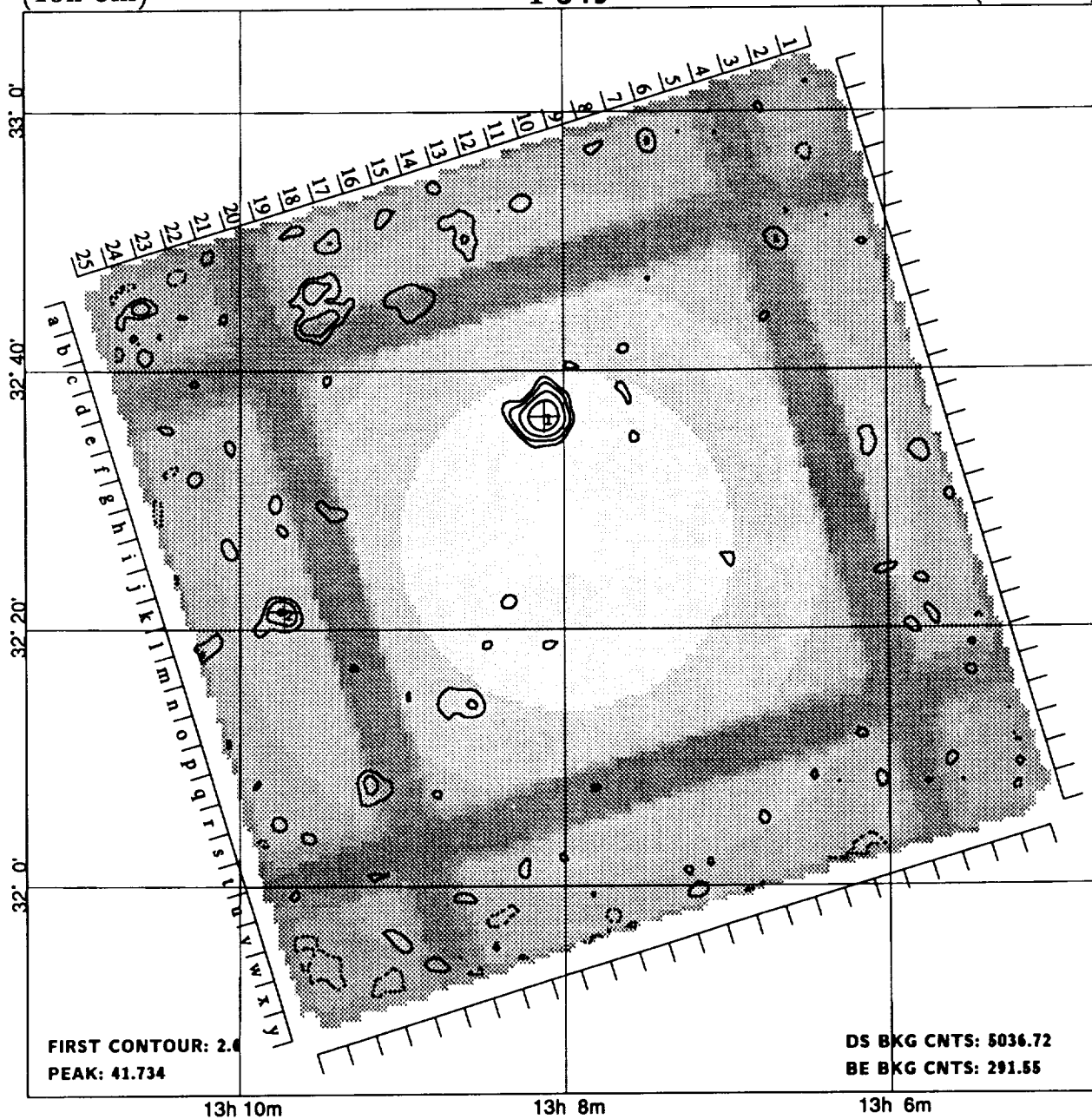
DATE: 1980/ 10 - 1980/ 10  
 LIVETIME: 1402.0s  
 ROLL ANGLE:  $-109.1^{\circ}$

NH:  $7.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 8m)

I 549

(13h 8m)



## B2 1308+326 QUASAR SURVEY

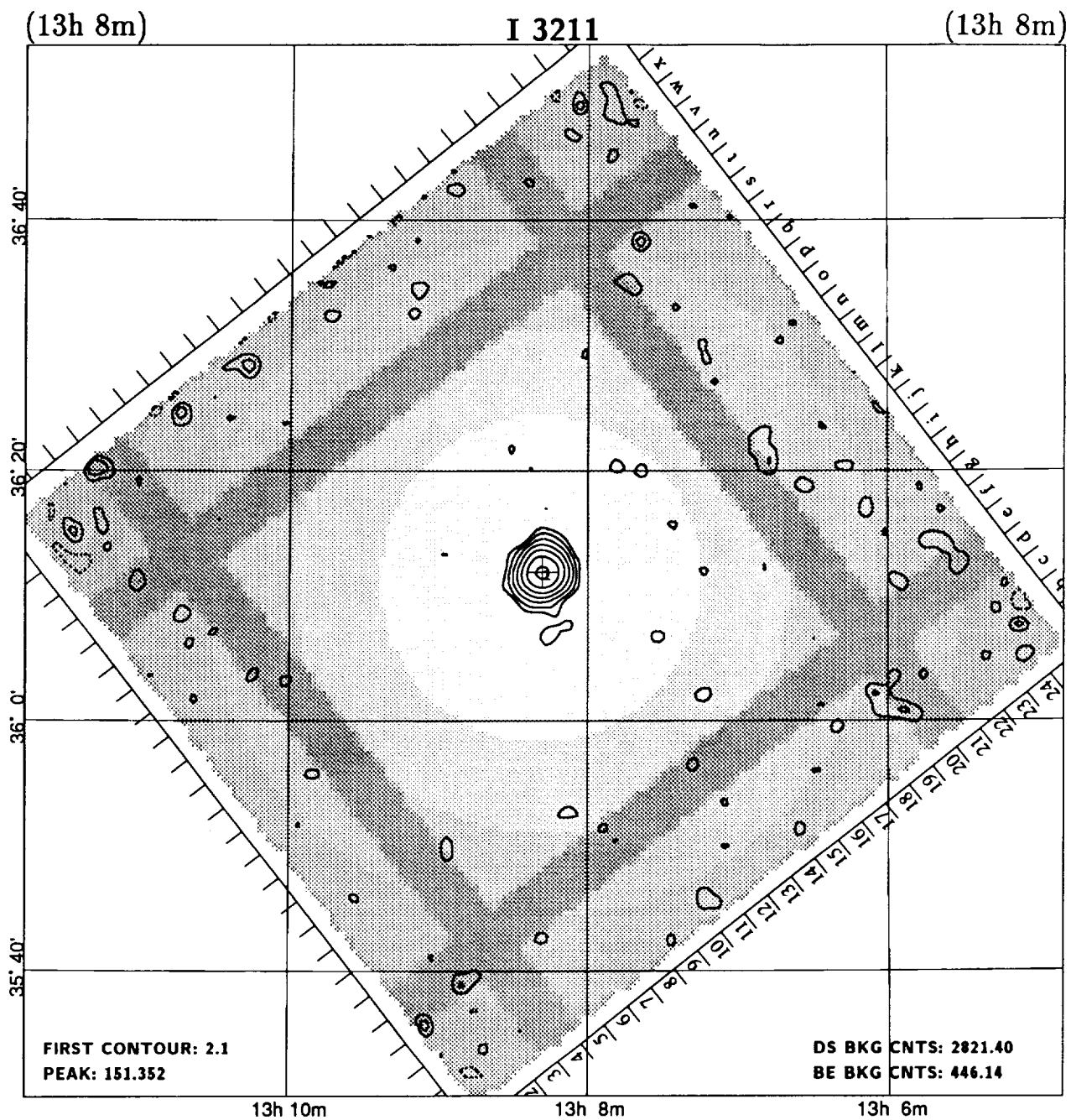
FIELD CENTER:  $13^{\text{h}}08^{\text{m}}00.0^{\text{s}}$   $32^{\circ}25'59''$  (B1950)  
 $13^{\text{h}}10^{\text{m}}21.2^{\text{s}}$   $32^{\circ}10'03''$  (J2000)  
 $\ell$ : 84.88  $b$ : 83.50

DATE: 1979/191 - 1980/196  
 LIVETIME: 4081.4s  
 ROLL ANGLE:  $73.1^{\circ}$

NH:  $1.1\text{E}+20$   
 REF/ID: BL  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2979	1	13 08 07.3	32 36 30	38	0.0582	0.0048	158.2	10.8	12.2	1.3	0	10.7	AH	BL
2995	2	13 09 43.8	32 21 24	52	0.0140	0.0032	26.6	10.4	4.4	0.9	0	22.4	AH	S





FIELD CENTER:  $13^h 08^m 17.9^s$   $36^\circ 12' 00''$  (B1950)  
 $13^h 10^m 37.1^s$   $35^\circ 56' 04''$  (J2000)  
 $\ell$ : 99.26  $b$ : 80.30

DATE: 1979/347 - 1979/347  
 LIVETIME: 2286.3s  
 ROLL ANGLE:  $-128.1^\circ$

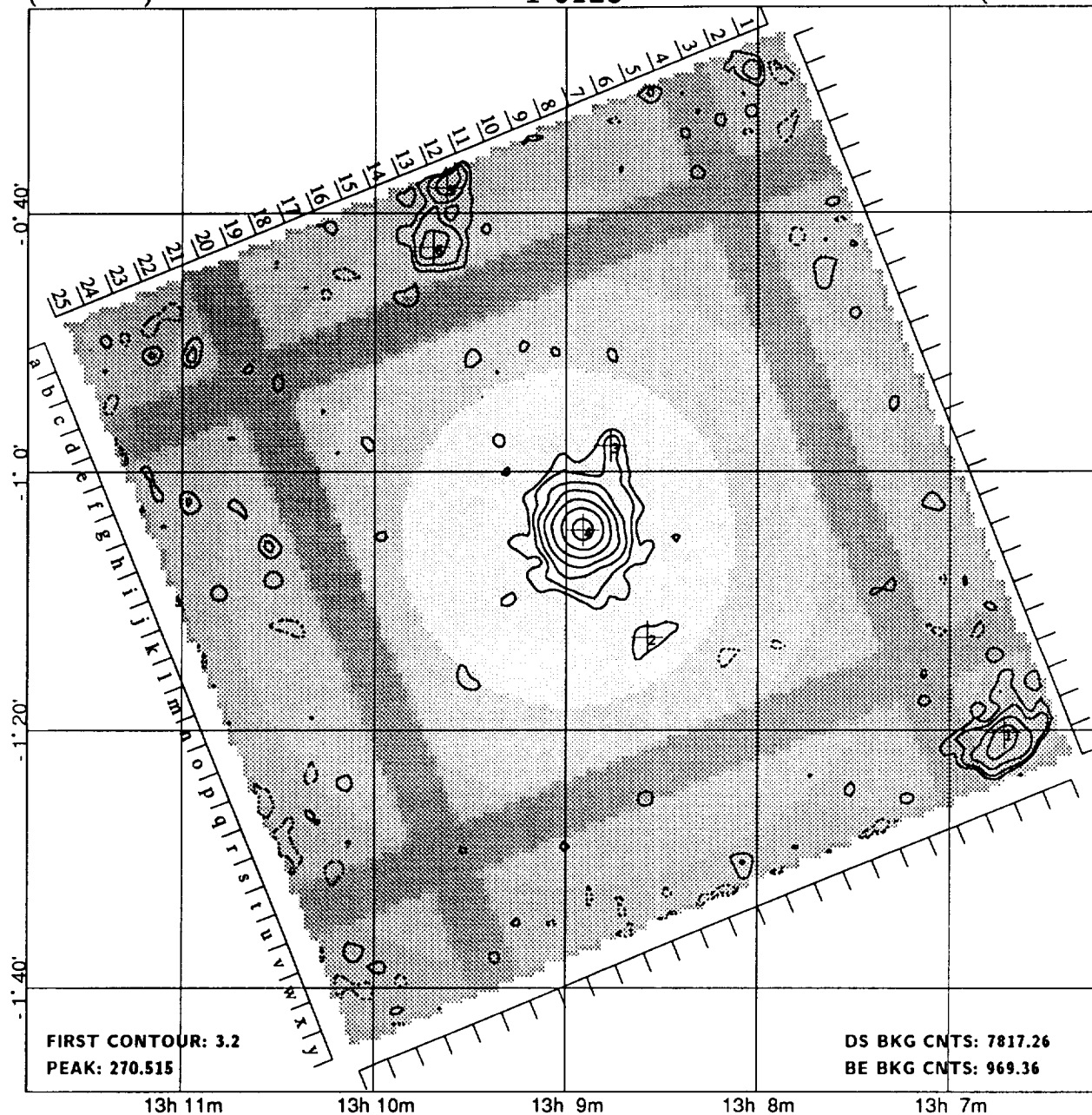
NH:  $1.0E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2980	1	13 08 18.2	36 11 57	31	0.390	0.015	664.8	8.2	25.6	1.3	0	0.2	H	CV

(13h 9m)

I 6123

(13h 9m)



## A 1689, DETAILED STUDY OF NEARBY CLUSTERS

FIELD CENTER:  $13^{\text{h}}09^{\text{m}}00.0^{\text{s}}$   $-01^{\circ}05'59''$  (B1950)  
 $13^{\text{h}}11^{\text{m}}34.2^{\text{s}}$   $-01^{\circ}21'55''$  (J2000)  
 $\ell$ : 313.39  $b$ : 61.10

DATE: 1980/195 - 1980/195

NH:  $1.9\text{E}+20$ 

LIVETIME: 6334.5s

REF/ID:

ROLL ANGLE:  $67.9^{\circ}$ 

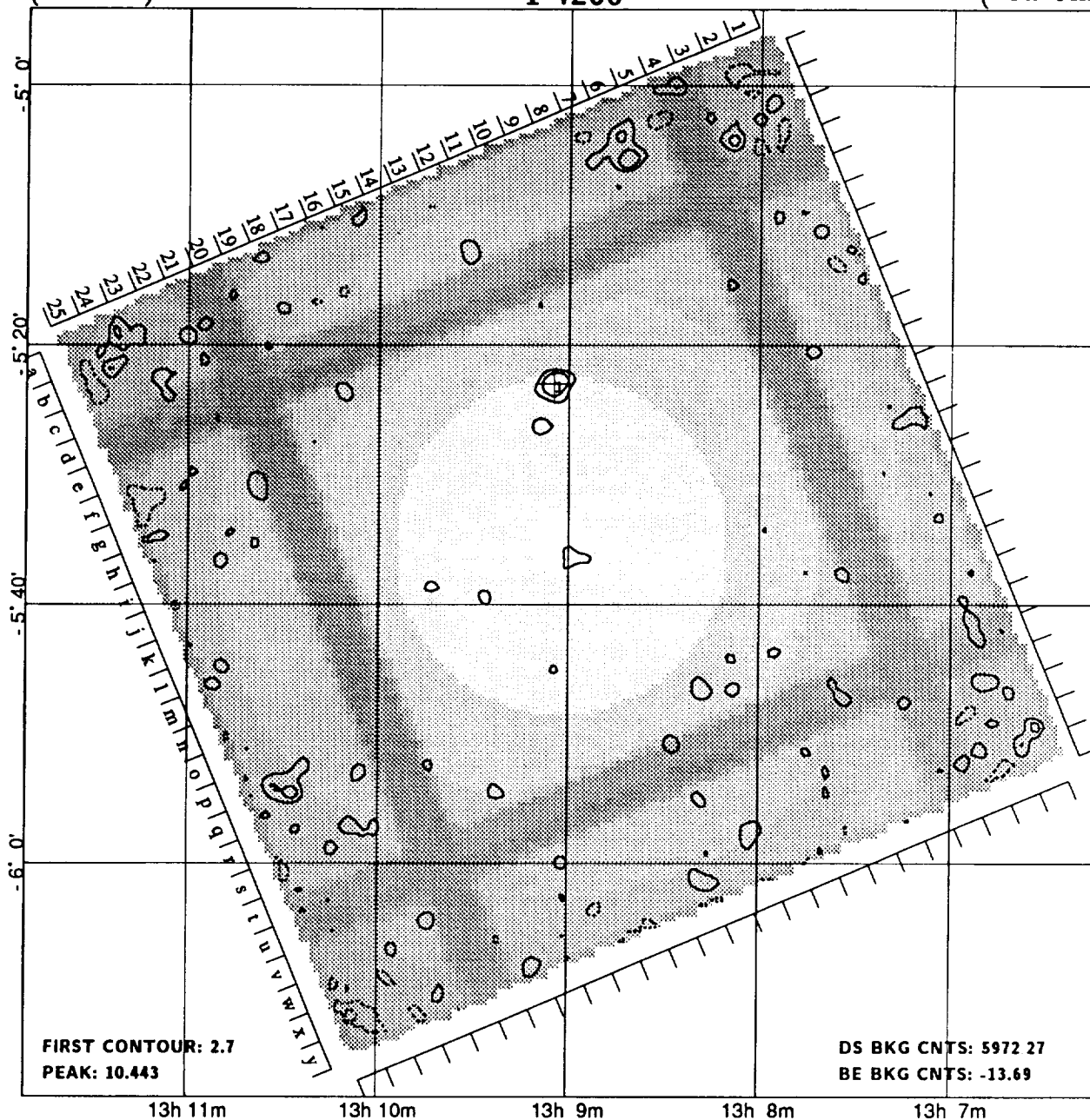
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2975	1	13 06 43.0	-01 20 11	50	0.0309	0.0052	46.0	13.0	6.0	2.3	0	36.9	AH	CLG
2982	2	13 08 34.5	-01 12 46	46	0.0061	0.0016	25.7	21.3	3.7	0.8	0	9.2	H	
2984	3	13 08 46.1	-00 57 58	42	0.0083	0.0018	35.9	23.1	4.7	70.6	0	8.8	AH	
2986	4	13 08 54.6	-01 04 31	31	0.2625	0.0075	1233.1	20.9	34.8	2.0	0	1.9	AH	
2992	5	13 09 37.5	-00 38 01	51	*0.0166	0.0031	37.5	10.5	5.4	3.0	601	29.6	H	
2993	6	13 09 41.7	-00 42 36	50	0.0202	0.0031	55.1	15.9	6.5	2.4	0	25.6	H	

(13h 9m)

I 4260

(13h 9m)



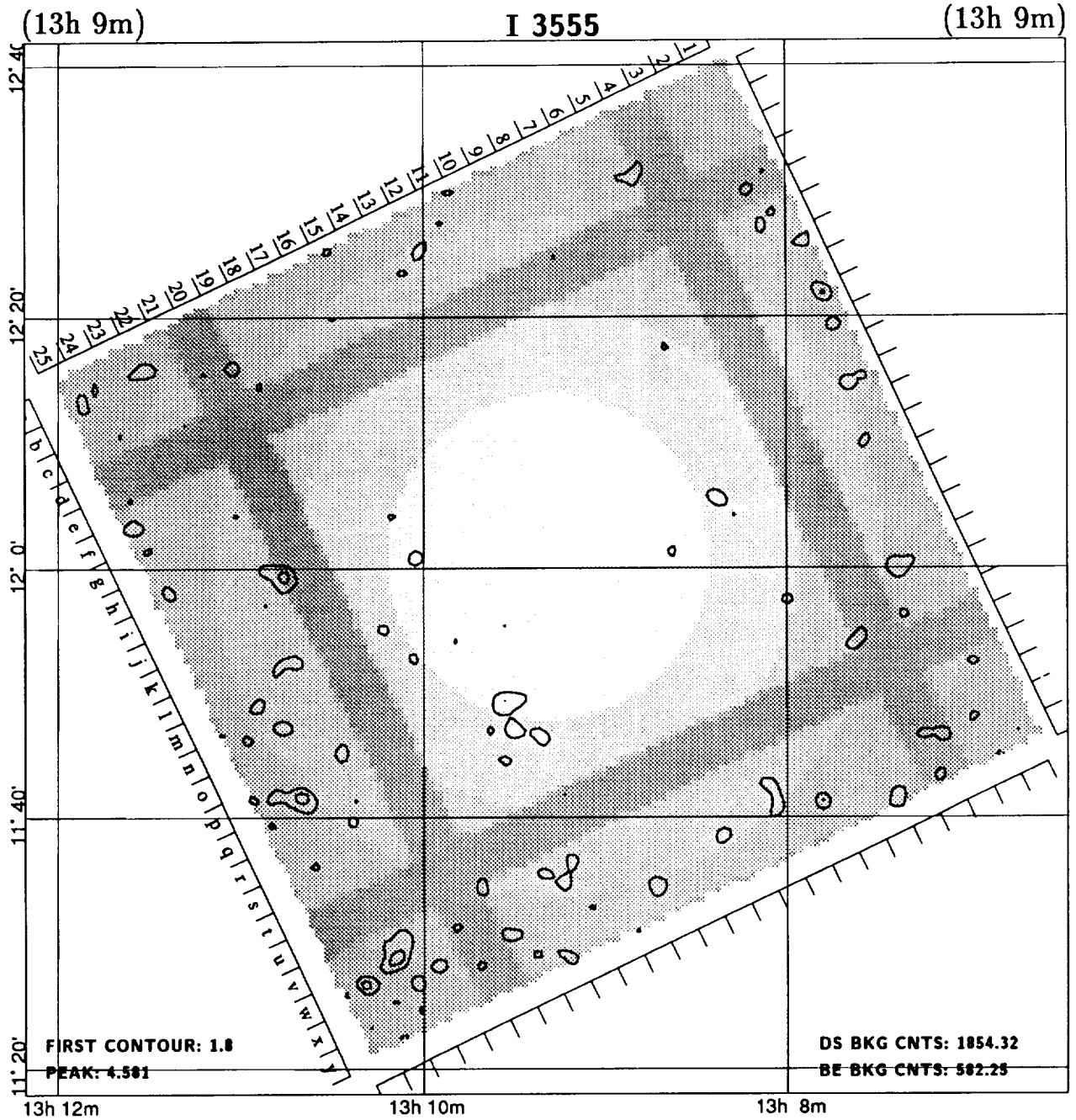
## OPTICALLY BRIGHT, RADIO-QUIET QSO

FIELD CENTER:  $13^{\text{h}}09^{\text{m}}02.0^{\text{s}}$   $-05^{\circ}36'06''$  (B1950)  
 $13^{\text{h}}11^{\text{m}}37.8^{\text{s}}$   $-05^{\circ}52'02''$  (J2000)  
 $l: 312.09$   $b: 56.64$

DATE: 1979/179 - 1979/179  
 LIVETIME: 4839.5s  
 ROLL ANGLE:  $67.3^{\circ}$

NH:  $2.6\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2987	1	13 09 04.7	-05 22 59	42	0.0094	0.0021	28.7	13.3	4.4	0.8	0	13.0	H	



CD GALAXIES IN POOR CLUSTERS:MKW 11

FIELD CENTER:  $13^{\text{h}}09^{\text{m}}19.2^{\text{s}}$   $11^{\circ}59'59''$  (B1950)  
 $13^{\text{h}}11^{\text{m}}48.7^{\text{s}}$   $11^{\circ}44'04''$  (J2000)  
 $l$ : 321.18  $b$ : 73.88

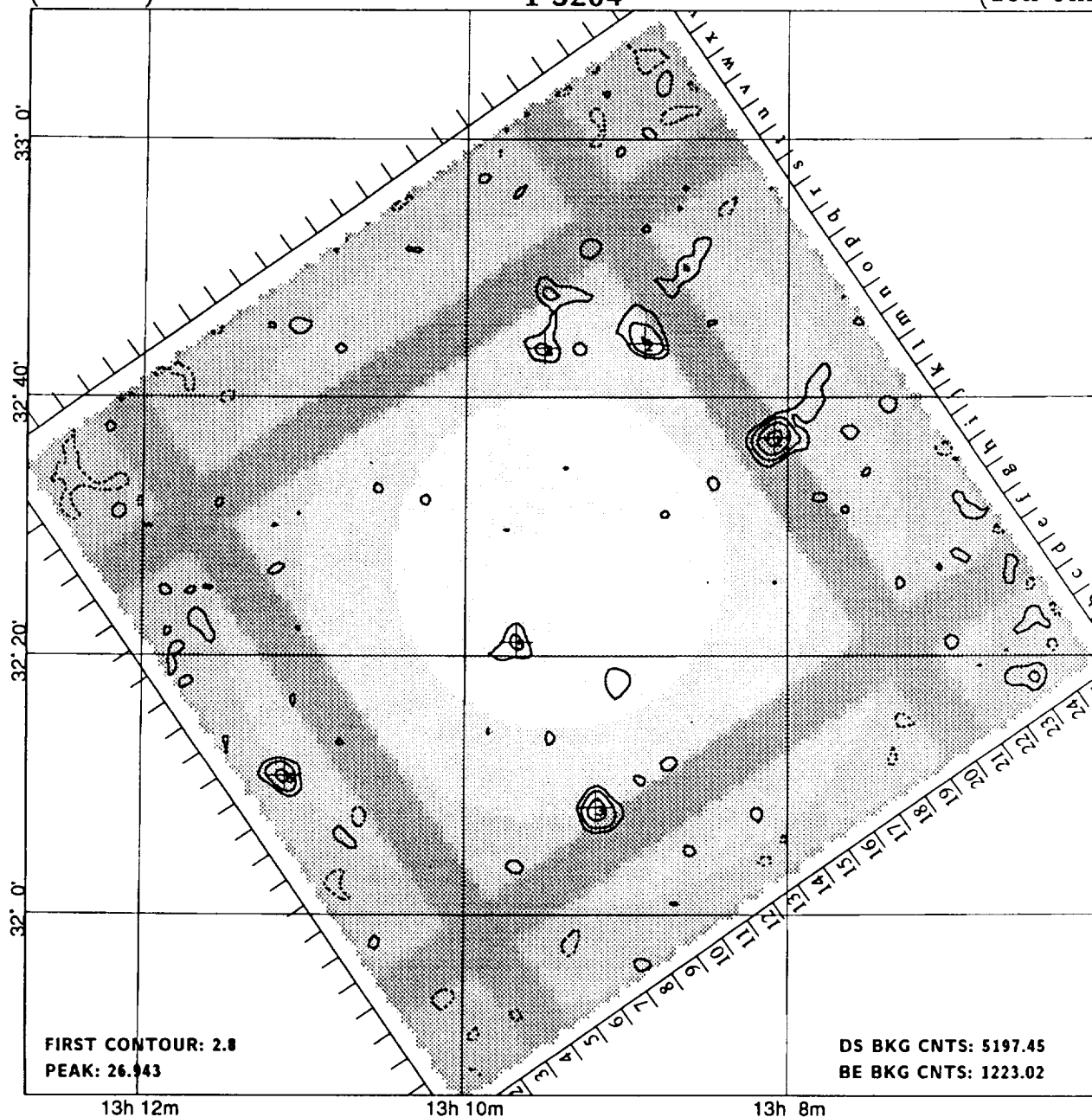
DATE: 1979/178 - 1979/178  
 LIVETIME: 1502.6s  
 ROLL ANGLE: 64.7°

NH: 2.0E+20  
 REF/ID:  
 FIELD FLAGS: L

(13h 9m)

I 5204

(13h 9m)



GALAXY B2 1308+326, COORDINATED X-RAY AND OPTICAL OBS.

FIELD CENTER:  $13^{\text{h}}09^{\text{m}}24.0^{\text{s}}$   $32^{\circ}27'59''$  (B1950)  
 $13^{\text{h}}11^{\text{m}}44.9^{\text{s}}$   $32^{\circ}12'04''$  (J2000)  
 $l: 83.15$   $b: 83.28$

DATE: 1979/346 - 1979/347

NH:  $1.1\text{E}+20$ 

LIVETIME: 4211.7s

REF/ID:

ROLL ANGLE:  $-124.8^{\circ}$ 

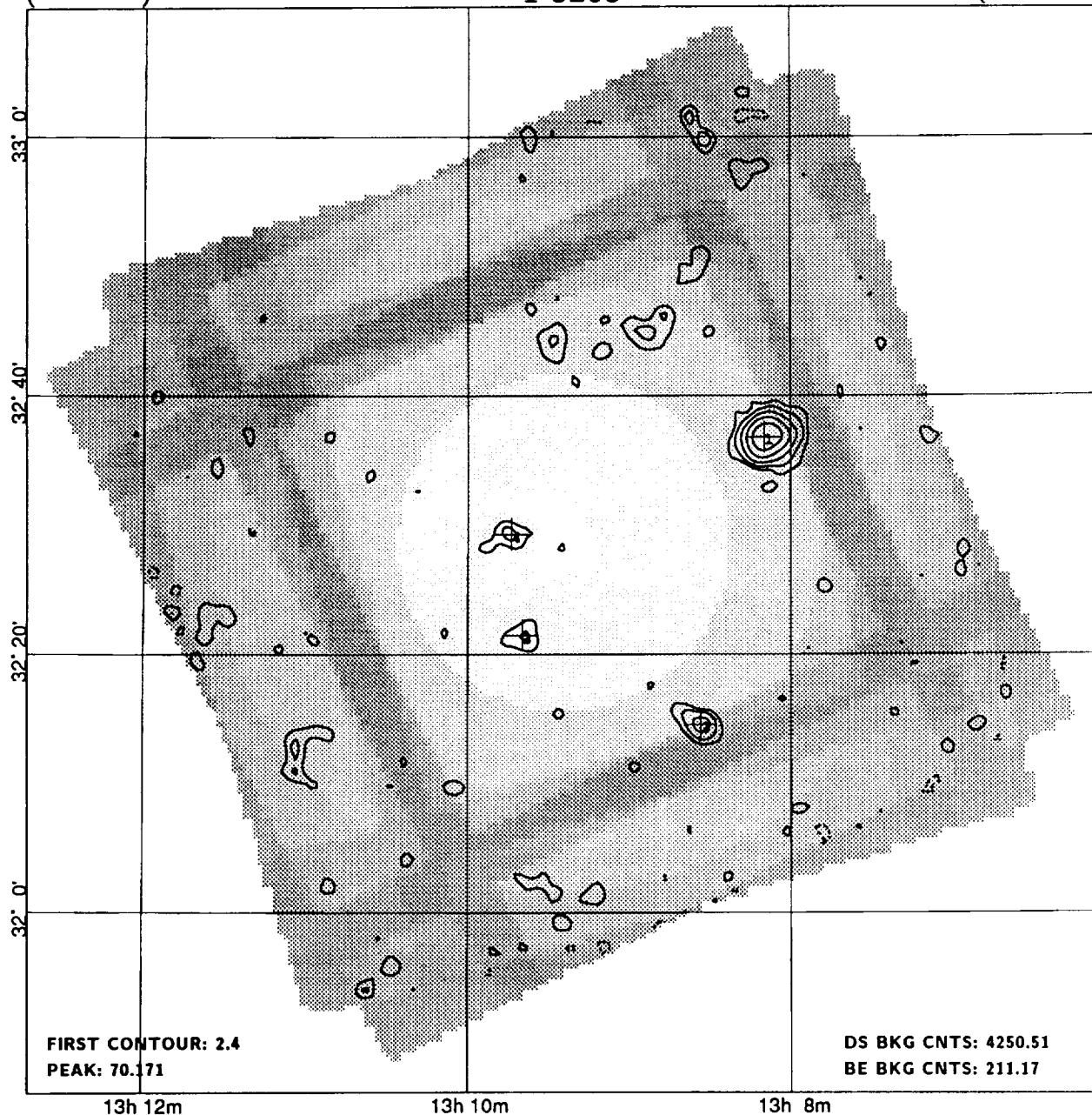
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2979	1	13 08 05.1	32 36 53	50	*0.0356	0.0042	78.3	6.7	8.5	1.3	1209	18.7	AH	BL
2985	2	13 08 53.4	32 44 12	51	*0.0171	0.0031	38.7	12.3	5.4	1.2	501	17.4	H	
2988	3	13 09 11.0	32 08 17	50	*0.0196	0.0033	43.0	9.0	6.0	1.1	601	20.0	H	
2991	4	13 09 30.8	32 43 51	55	0.0095	0.0025	22.7	12.3	3.8	1.6	0	15.9	H	
2995	5	13 09 40.9	32 21 05	43	0.0075	0.0021	22.0	16.0	3.6	0.9	0	7.4	A	S
2999	6	13 11 06.7	32 10 44	51	0.0159	0.0036	26.6	10.4	4.4	0.9	0	27.7	H	

(13h 9m)

I 5205

(13h 9m)



GALAXY B2 1308+326, COORDINATED X-RAY AND OPTICAL OBS.

FIELD CENTER:  $13^{\text{h}}09^{\text{m}}24.0^{\text{s}}$   $32^{\circ}27'59''$  (B1950)

DATE: 1980/182 - 1980/190

NH:  $1.1\text{E}+20$  $13^{\text{h}}11^{\text{m}}44.9^{\text{s}}$   $32^{\circ}12'04''$  (J2000)

LIVETIME: 3444.3s

REF/ID:

 $l: 83.15$   $b: 83.28$ 

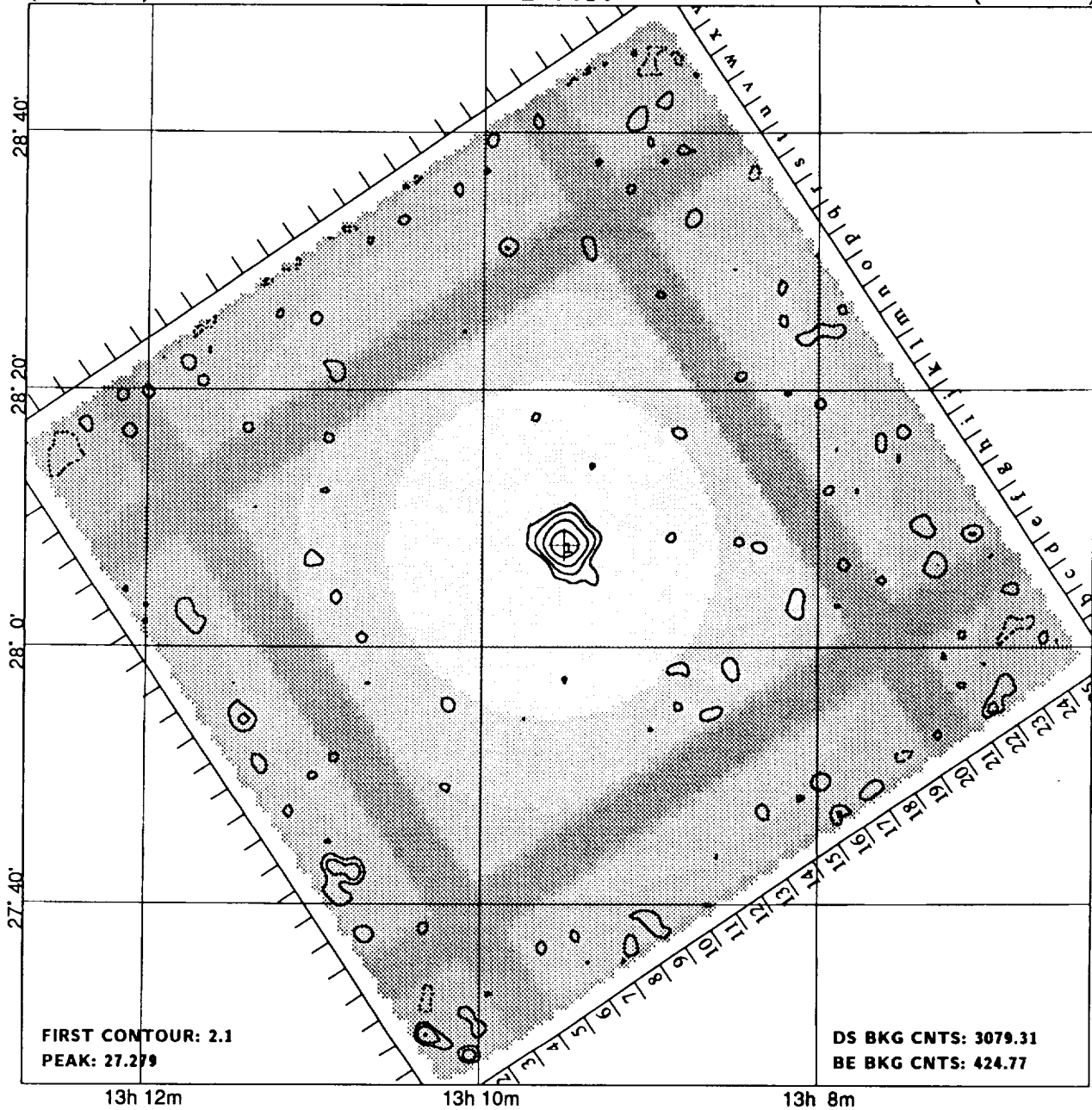
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2979	1	13 08 09.7	32 36 46	47	*0.1140	0.0079	215.4	6.6	14.5	1.3	401	18.2	AH	BL
2981	2	13 08 33.4	32 14 30	51	*0.0187	0.0035	35.4	7.6	5.4	1.0	905	17.1	H	
2995	3	13 09 39.7	32 21 29	46	0.0098	0.0024	23.1	9.9	4.0	0.8	0	7.1	AH	S
2994	4	13 09 43.8	32 29 20	37	0.0079	0.0022	19.7	11.3	3.5	0.8	0	4.6	H	

(13h 9m)

I 4457

(13h 9m)



## BETA COM, CORRELLATION OF X RAYS WITH STELLAR WIND AND ROTATION

FIELD CENTER:  $13^h 09^m 33.0^s$   $28^\circ 07' 51''$  (B1950)  
 $13^h 11^m 55.9^s$   $27^\circ 51' 57''$  (J2000)  
 $l: 43.33$   $b: 85.40$

DATE: 1979/347 - 1979/347

NH:  $1.0E+20$ 

LIVETIME: 2495.3s

REF/ID:

ROLL ANGLE:  $-123.9^\circ$ 

FIELD FLAGS:

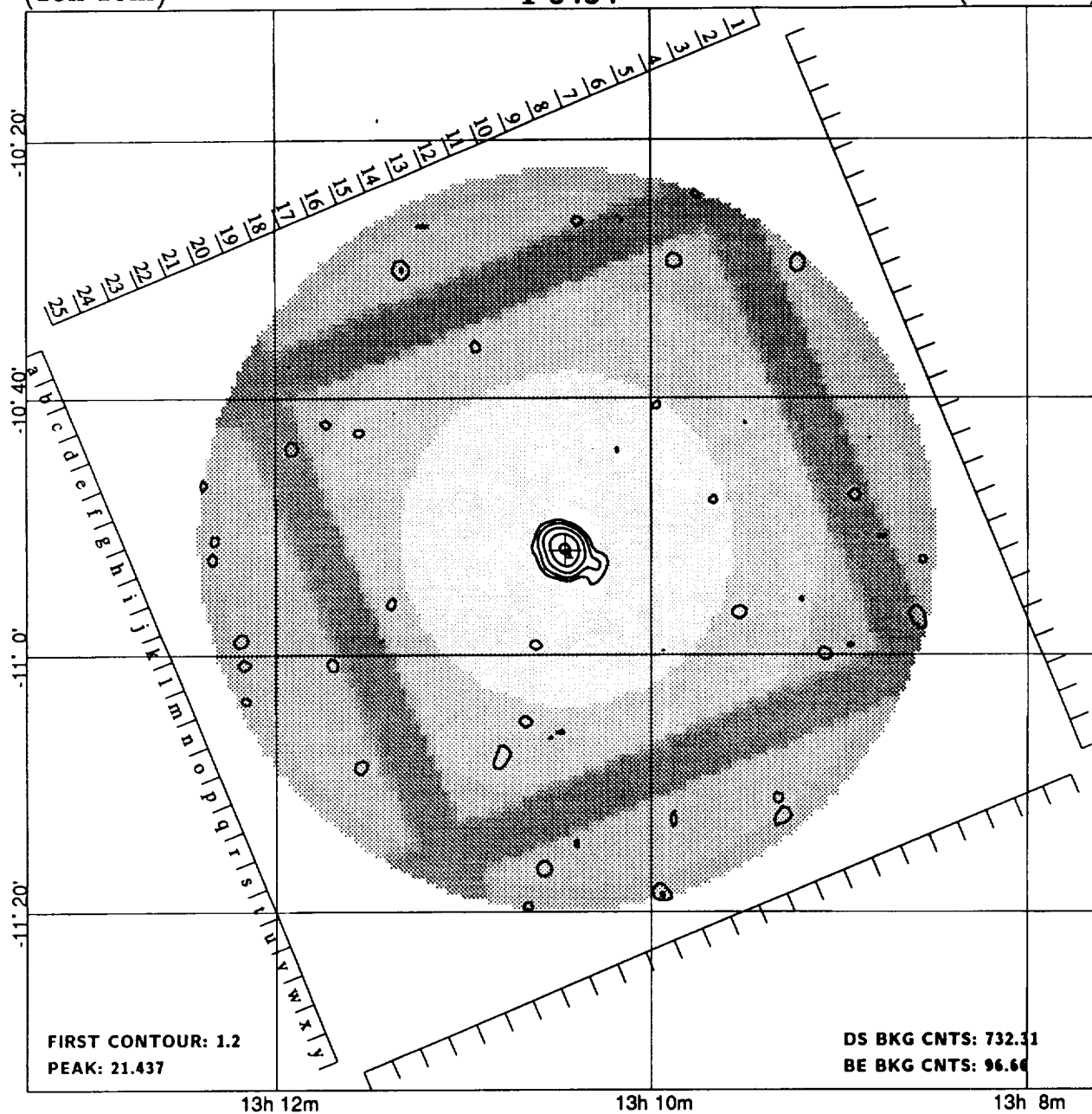
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2990	1	13 09 30.7	28 07 58	31	0.0677	0.0063	125.5	9.5	10.8	1.4	0	0.8	H	S



(13h 10m)

I 8434

(13h 10m)



## SURVEY OF BRIGHT (PG) QUASARS

FIELD CENTER:  $13^h 10^m 28.0^s$   $-10^\circ 51' 47''$  (B1950)  
 $13^h 13^m 05.7^s$   $-11^\circ 07' 41''$  (J2000)  
 $l: 311.46$   $b: 51.38$

DATE: 1980/196 - 1980/196  
 LIVETIME: 593.4s  
 ROLL ANGLE:  $67.5^\circ$

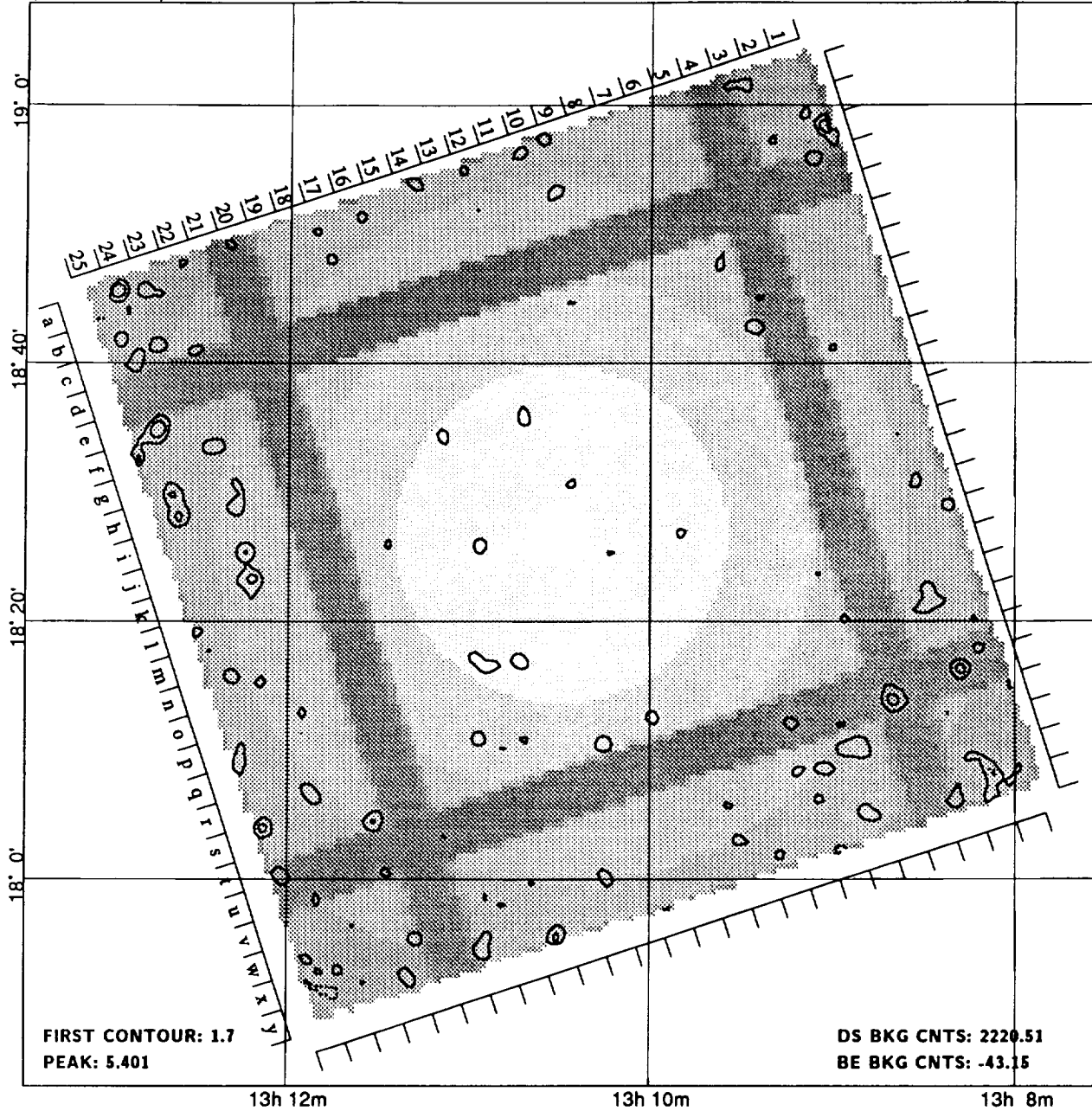
NH:  $2.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2997	1	13 10 27.6	-10 51 50	31	0.199	0.021	88.0	2.0	9.3	1.2	0	0.2	H	Q

(13h 10m)

I 6472

(13h 10m)

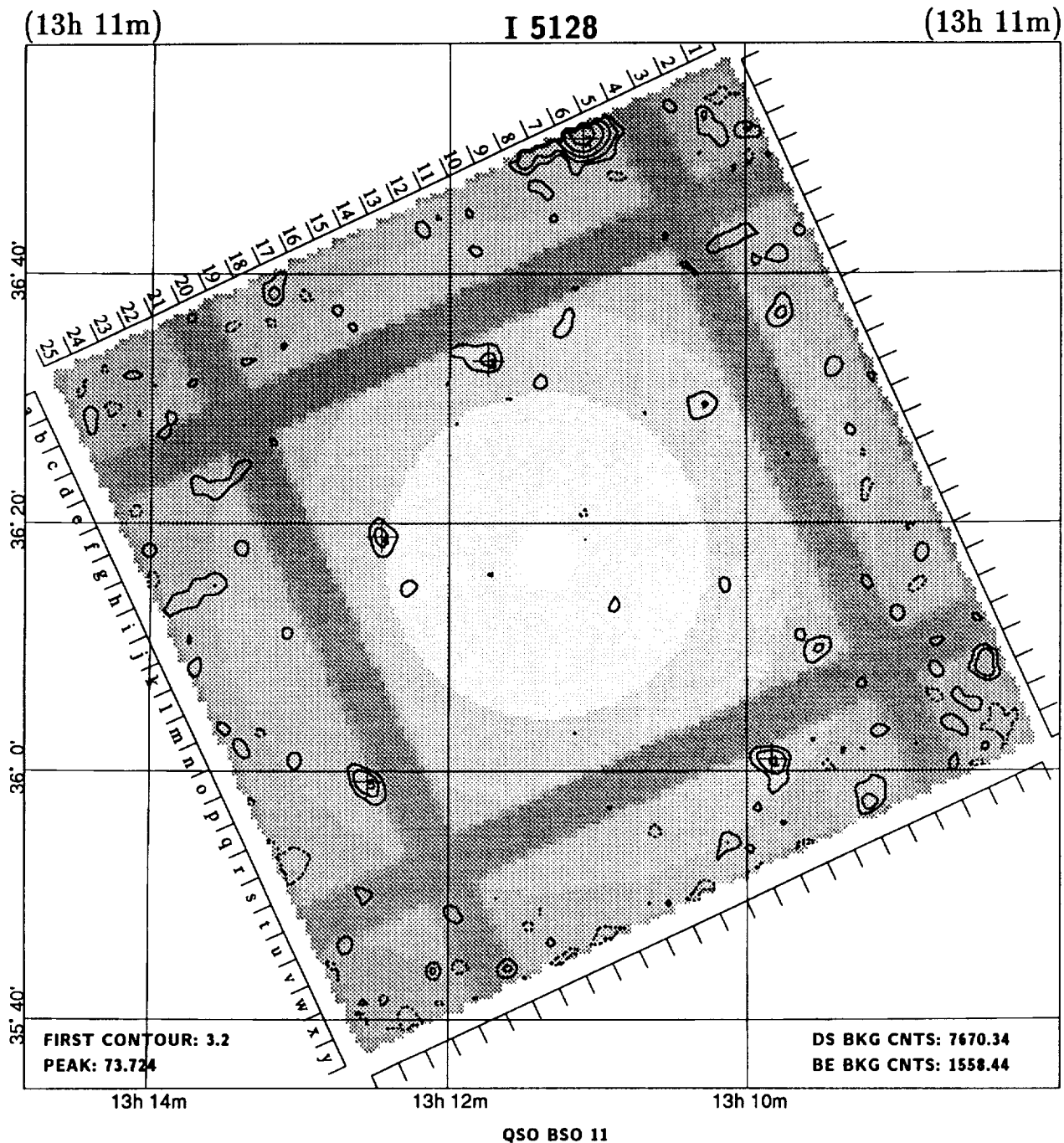


## NGC 5024, GLOBULAR CLUSTER SURVEY

FIELD CENTER:  $13^{\text{h}}10^{\text{m}}30.0^{\text{s}}$   $18^{\circ}25'59''$  (B1950)  
 $13^{\text{h}}12^{\text{m}}56.9^{\text{s}}$   $18^{\circ}10'06''$  (J2000)  
 $l: 333.00$   $b: 79.76$

DATE: 1980/190 - 1980/190  
 LIVETIME: 1799.3s  
 ROLL ANGLE:  $72.0^{\circ}$

NH:  $1.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



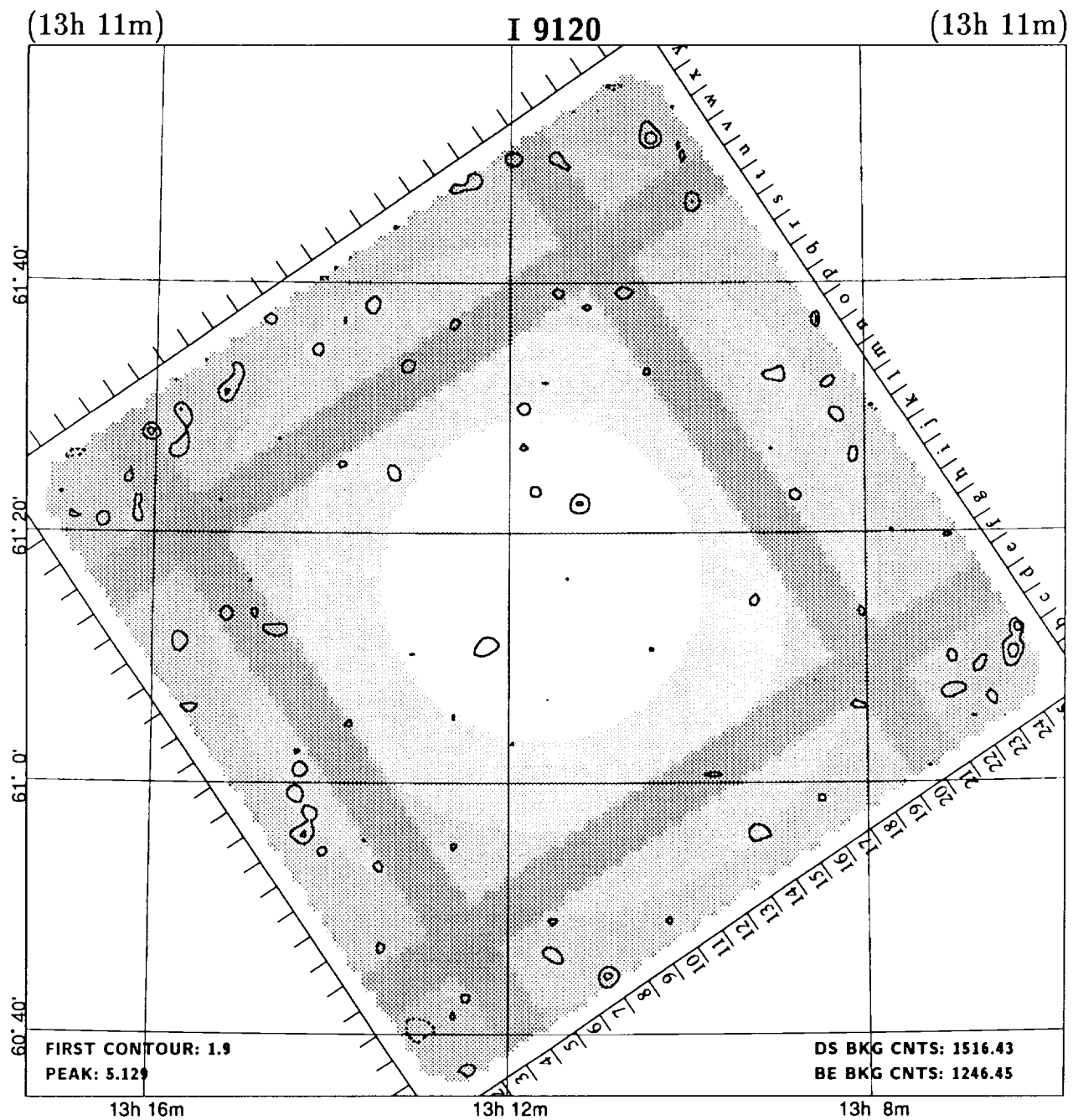
**QSO BSO 11**

FIELD CENTER:  $13^{\text{h}}11^{\text{m}}22.0^{\text{s}}$   $36^{\circ}16'29''$  (B1950)  
 $13^{\text{h}}13^{\text{m}}40.5^{\text{s}}$   $36^{\circ}00'37''$  (J2000)  
 $l: 96.28$   $b: 79.94$

DATE: 1980/180 - 1980/180  
 LIVETIME: 6215.5s  
 ROLL ANGLE:  $65.1^{\circ}$

NH:  $1.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2996	1	13 09 50.0	36 00 57	52	*0.0096	0.0023	26.3	12.7	4.2	0.9	501	24.1	H	AGN
2998	2	13 11 05.8	36 50 48	48	*0.0716	0.0068	120.2	8.8	10.6	1.2	703	34.7	H	
3001	3	13 11 44.4	36 33 00	55	0.0078	0.0019	27.6	16.4	4.2	0.9	300	17.5	H	
3004	4	13 12 27.4	36 18 55	43	0.0061	0.0017	23.3	18.7	3.6	0.8	0	13.8	H	
3005	5	13 12 32.7	35 59 10	54	*0.0099	0.0023	28.1	13.9	4.3	0.9	703	22.6	H	

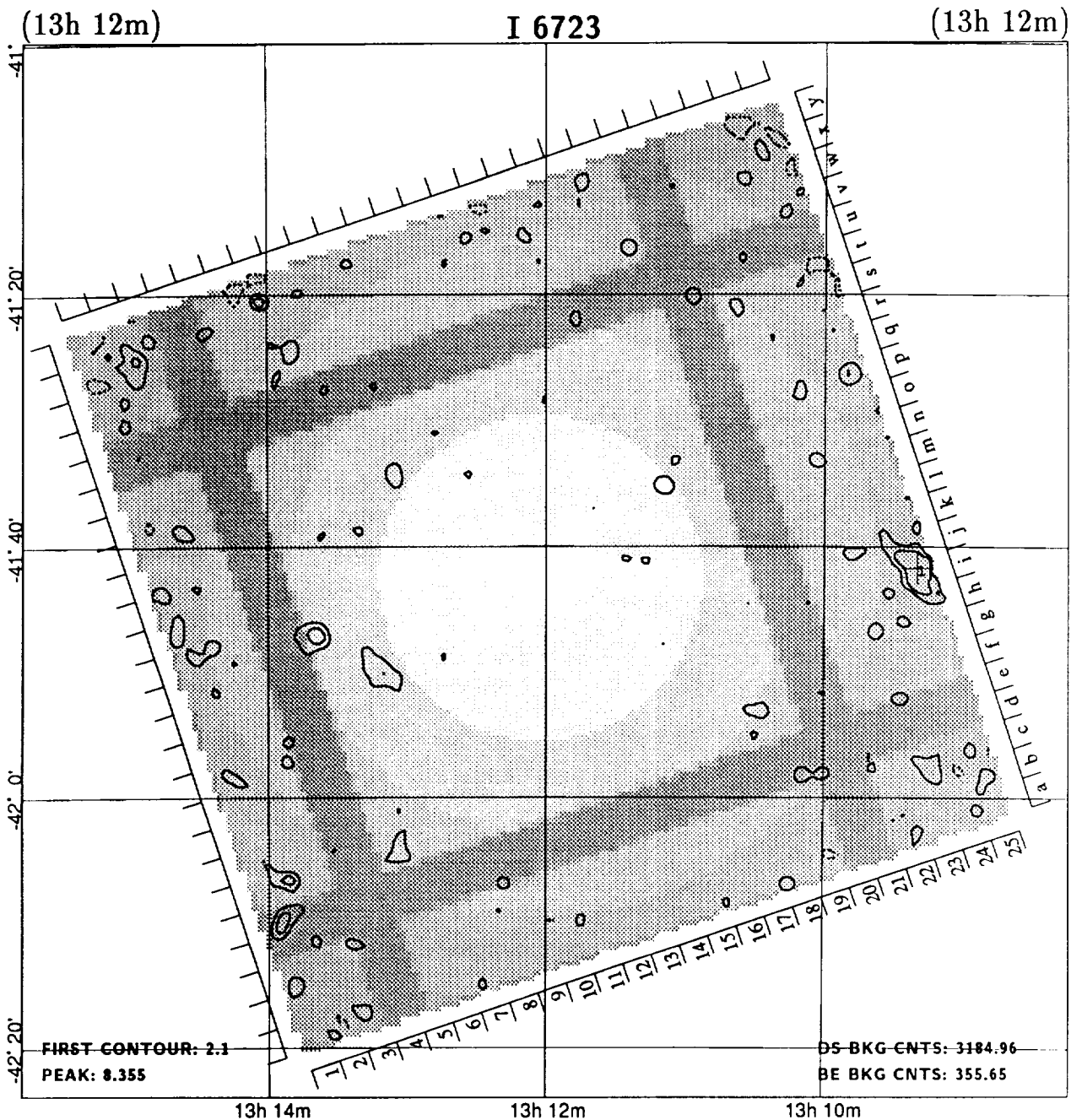


CLUSTER OF GALAXY SURVEY: A1701a

FIELD CENTER:  $13^{\text{h}}11^{\text{m}}36.0^{\text{s}}$   $61^{\circ}16'59''$  (B1950)  
 $13^{\text{h}}13^{\text{m}}32.0^{\text{s}}$   $61^{\circ}01'07''$  (J2000)  
 $l: 118.16$   $b: 55.90$

DATE: 1980/358 - 1980/358  
 LIVETIME: 1228.8s  
 ROLL ANGLE:  $-124.1^{\circ}$

NH:  $1.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



**EXTENDED EMISSION FROM CEN-A RADIO LOBES, POS 3**

FIELD CENTER: 13<sup>h</sup>12<sup>m</sup>00.0<sup>s</sup> -41°41'59" (B1950)  
 13<sup>h</sup>14<sup>m</sup>52.6<sup>s</sup> -41°57'51" (J2000)  
 $\ell$ : 307.59  $b$ : 20.70

DATE: 1980/ 10 - 1980/ 10  
 LIVETIME: 2580.9s  
 ROLL ANGLE: -108.5°

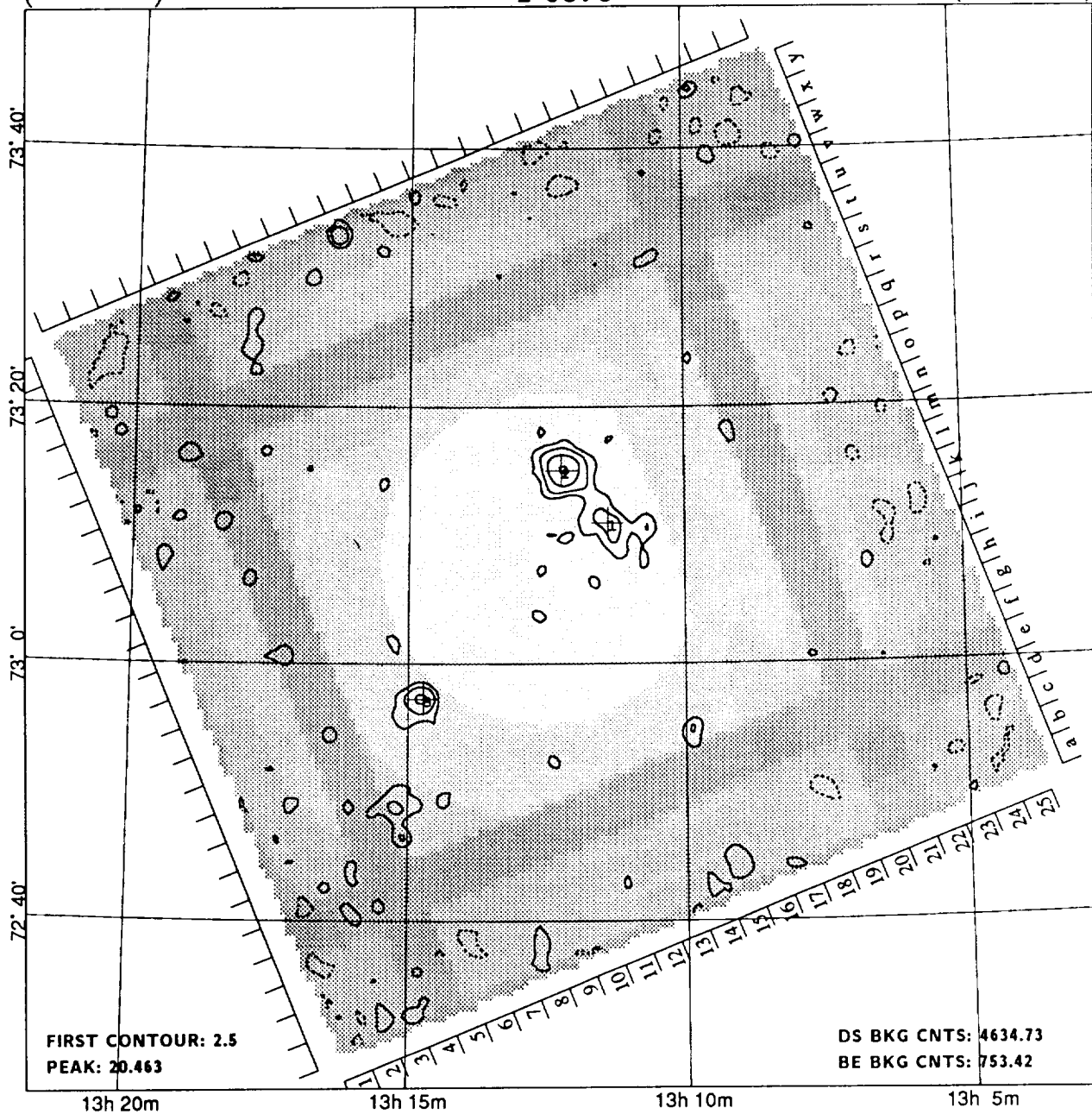
NH: 7.0E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
2989	1	13 09 20.1	-41 41 43	56	0.0234	0.0060	19.6	5.4	3.9	1.5	600	29.7	EH	

(13h 12m)

I 6878

(13h 12m)



A1705, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $13^h 12^m 18.0^s$   $73^\circ 08' 59''$  (B1950)  
 $13^h 13^m 43.2^s$   $72^\circ 53' 08''$  (J2000)  
 $l: 120.65$   $b: 44.14$

DATE: 1980/358 - 1980/358  
 LIVETIME: 3755.7s  
 ROLL ANGLE:  $-111.9^\circ$

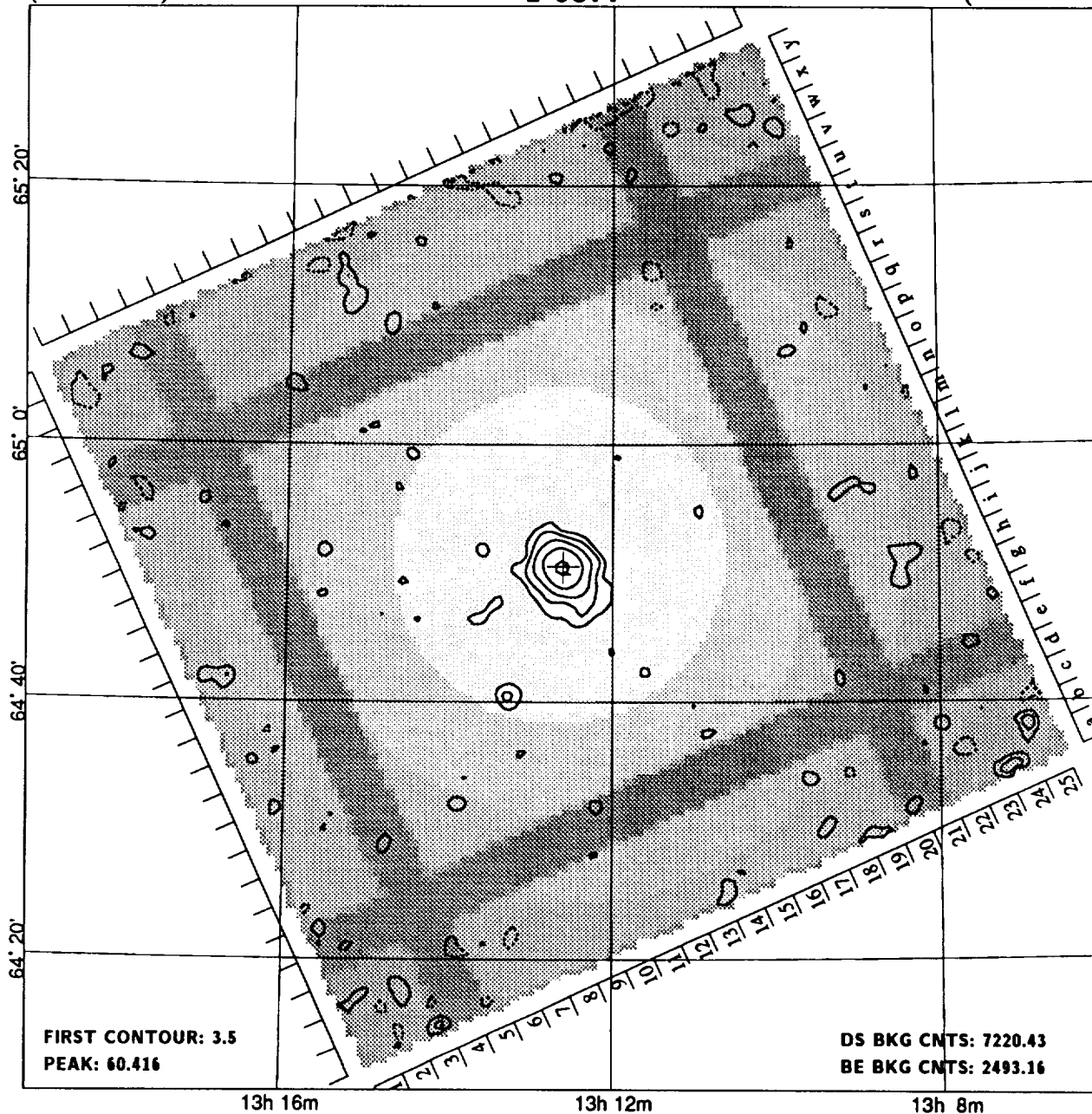
NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3000	1	13 11 23.6	73 10 53	36	0.0100	0.0024	26.7	13.3	4.2	5.8	0	3.8	H	CLG
3003	2	13 12 14.4	73 14 59	38	0.0320	0.0037	84.0	12.0	8.6	1.9	0	6.0	H	CLG
3011	3	13 14 43.9	72 57 14	50	0.0160	0.0031	36.4	11.6	5.2	1.0	0	15.7	H	

(13h 12m)

I 6877

(13h 12m)



FIELD CENTER:  $13^h 12^m 36.0^s$   $64^\circ 51' 59''$  (B1950)  
 $13^h 14^m 25.1^s$   $64^\circ 36' 08''$  (J2000)  
 $l: 118.90$   $b: 52.35$

DATE: 1980/358 - 1980/358  
 LIVETIME: 5851.0s  
 ROLL ANGLE:  $-114.5^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS:

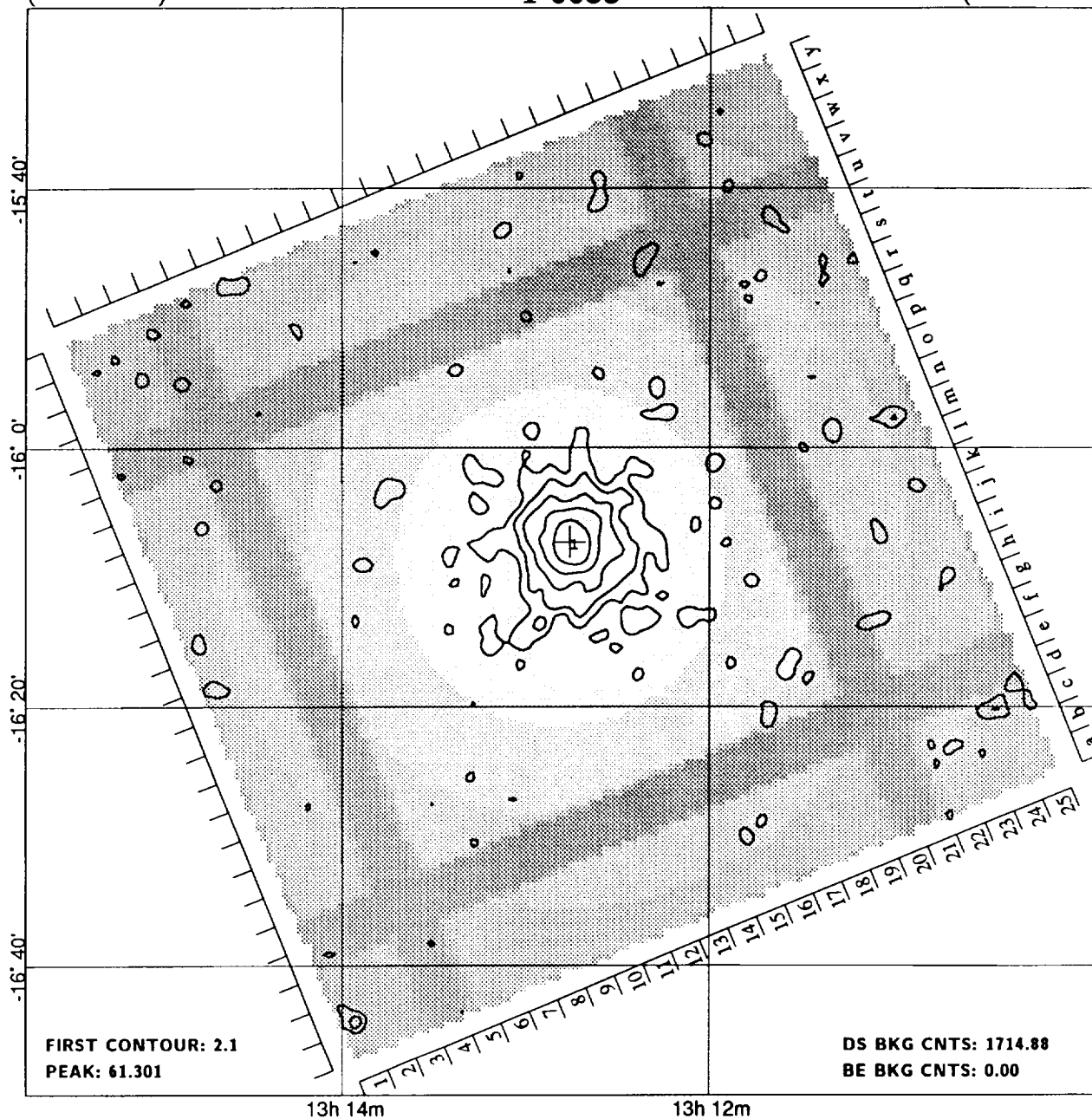
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3006	1	13 12 36.8	64 50 32	31	0.0691	0.0041	300.7	25.3	16.7	1.9	0	1.2	H	CLG



(13h 12m)

I 6653

(13h 12m)



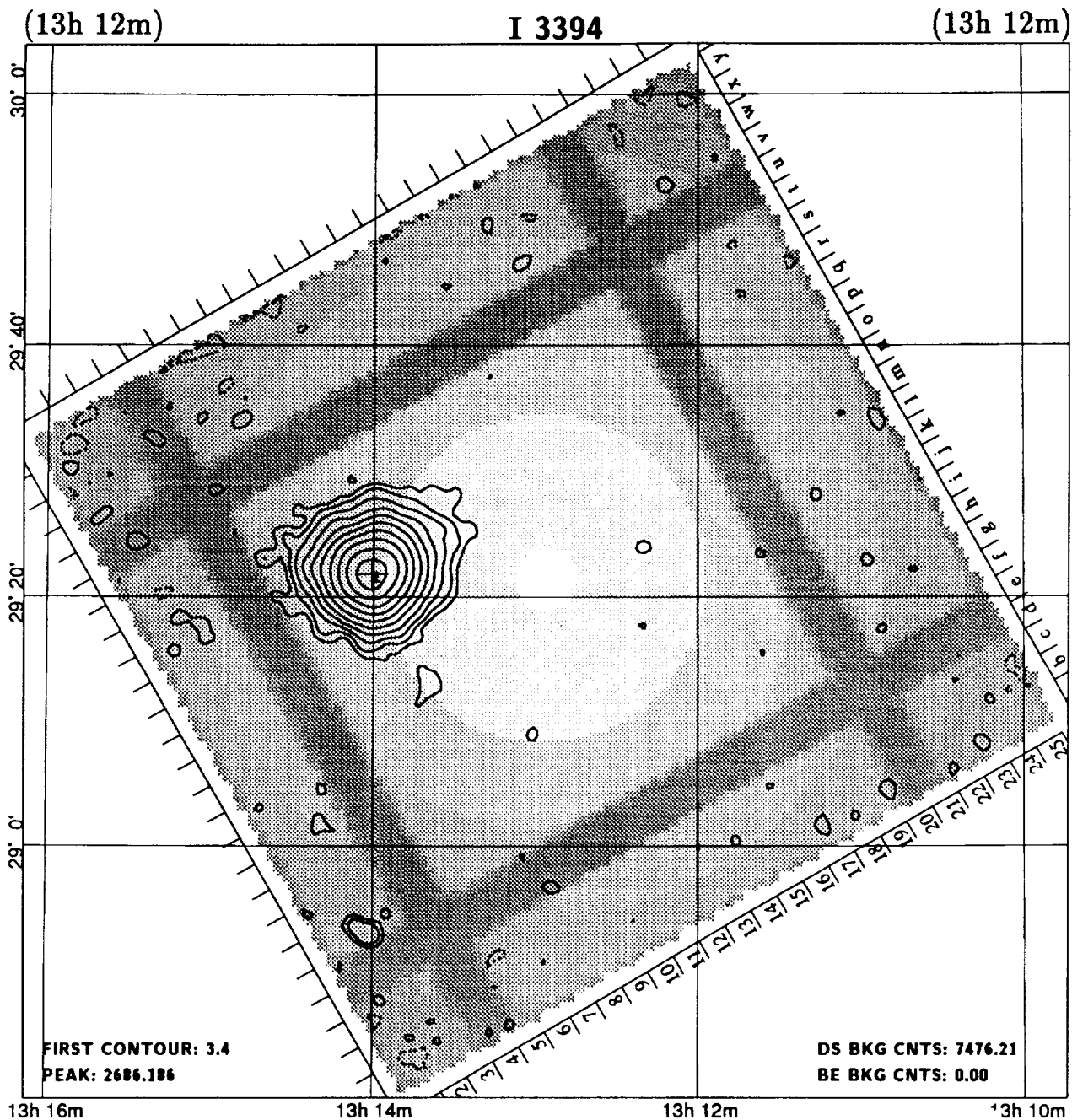
## WP 23,SURVEY OF GROUPS OF GALAXIES

FIELD CENTER:  $13^h 12^m 48.0^s$   $-16^\circ 07' 59''$  (B1950)  
 $13^h 15^m 27.9^s$   $-16^\circ 23' 50''$  (J2000)  
 $l: 311.25$   $b: 46.09$

DATE: 1980/ 12 - 1980/ 12  
 LIVETIME: 1389.6s  
 ROLL ANGLE:  $-112.3^\circ$

NH:  $5.0E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3007	1L	13 12 45.5	-16 07 14	31	0.140	0.021	144.0	167.0	6.5	3.3	0	1.0		



**HZ 43 BORESIGHT 2**

**FIELD CENTER:**  $13^h 12^m 55.9^s$   $29^\circ 22' 01''$  (B1950)  
 $13^h 15^m 17.8^s$   $29^\circ 06' 10''$  (J2000)  
 $l: 54.90$   $b: 84.38$

**DATE:** 1978/354 - 1978/355  
**LIVETIME:** 6058.2s  
**ROLL ANGLE:**  $-119.9^\circ$

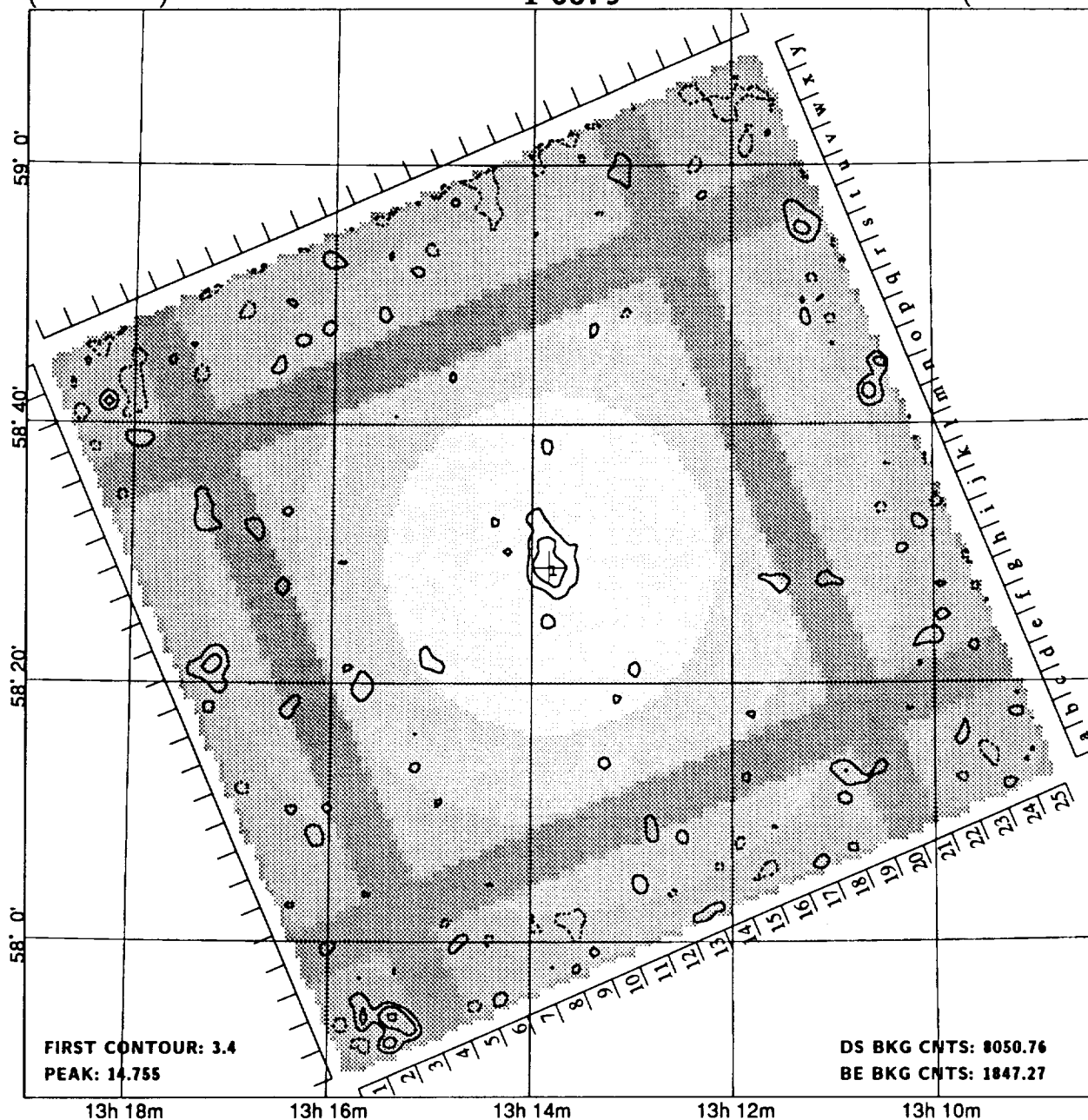
**NH:** 1.0E+20  
**REF/ID:**  
**FIELD FLAGS:** L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3009	1L	13 14 00.6	29 21 46	37	1.773	0.034	6528.5	4171.5	52.2	2.2	0	13.9	A	S

(13h 13m)

I 6879

(13h 13m)



A1707, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $13^h 13^m 42.0^s$   $58^\circ 29' 59''$  (B1950)  
 $13^h 15^m 41.0^s$   $58^\circ 14' 10''$  (J2000)  
 $l: 116.81$   $b: 58.60$

DATE: 1980/357 - 1980/357  
 LIVETIME: 6523.8s  
 ROLL ANGLE:  $-113.2^\circ$

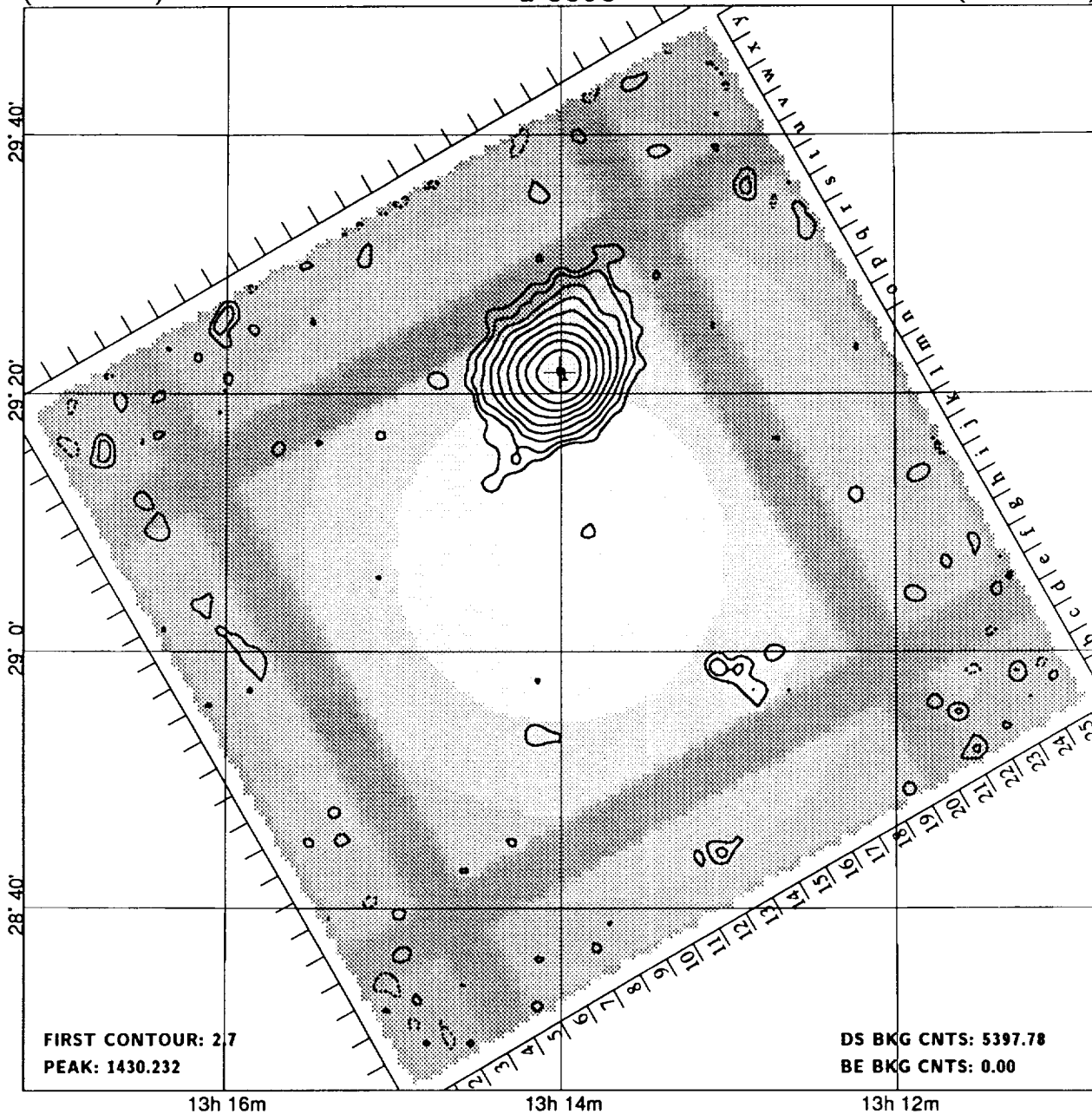
NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3008	1	13 13 49.8	58 28 57	35	0.0113	0.0018	55.2	23.8	6.2	1.8	0	1.7	H	CLG

(13h 14m)

I 3393

(13h 14m)



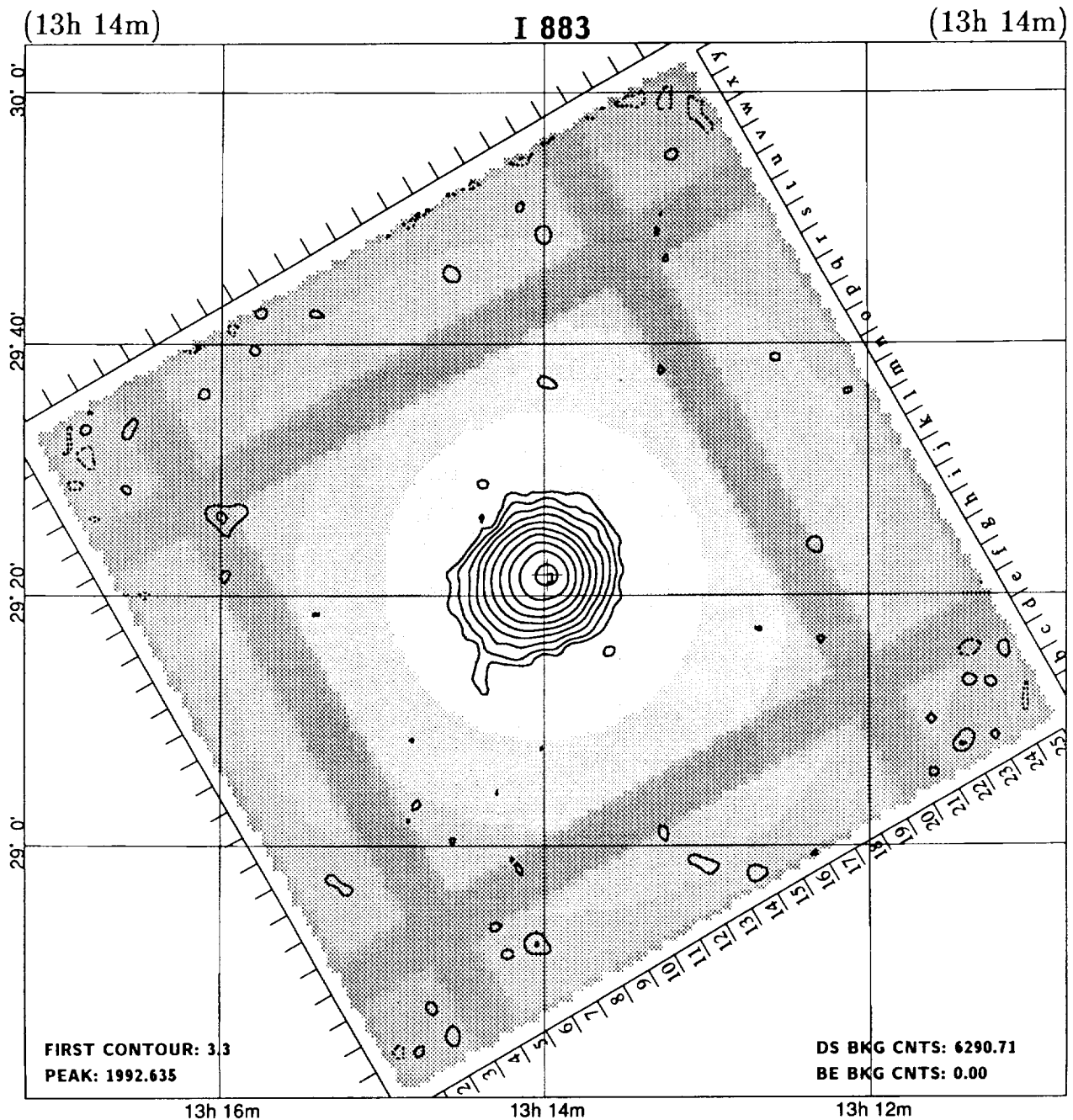
## HZ 43 BORESIGHT 2

FIELD CENTER:  $13^h 14^m 00.0^s$   $29^\circ 08' 01''$  (B1950)  
 $13^h 16^m 21.8^s$   $28^\circ 52' 12''$  (J2000)  
 $l: 51.95$   $b: 84.23$

DATE: 1978/355 - 1978/355  
 LIVETIME: 4374.0s  
 ROLL ANGLE:  $-119.9^\circ$

NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3009	1L	13 14 00.5	29 21 37	37	1.265	0.035	3349.4	2560.6	35.7	2.3	0	13.6	A	S



**EG 098 (HZ43) STELLAR OBSERVATIONS, WHITE DWARFS**

FIELD CENTER:  $13^h 14^m 00.0^s$   $29^\circ 22' 01''$  (B1950)  
 $13^h 16^m 21.7^s$   $29^\circ 06' 12''$  (J2000)  
 $l: 54.15$   $b: 84.16$

DATE: 1978/355 - 1978/355  
 LIVETIME: 5097.6s  
 ROLL ANGLE:  $-120.0^\circ$

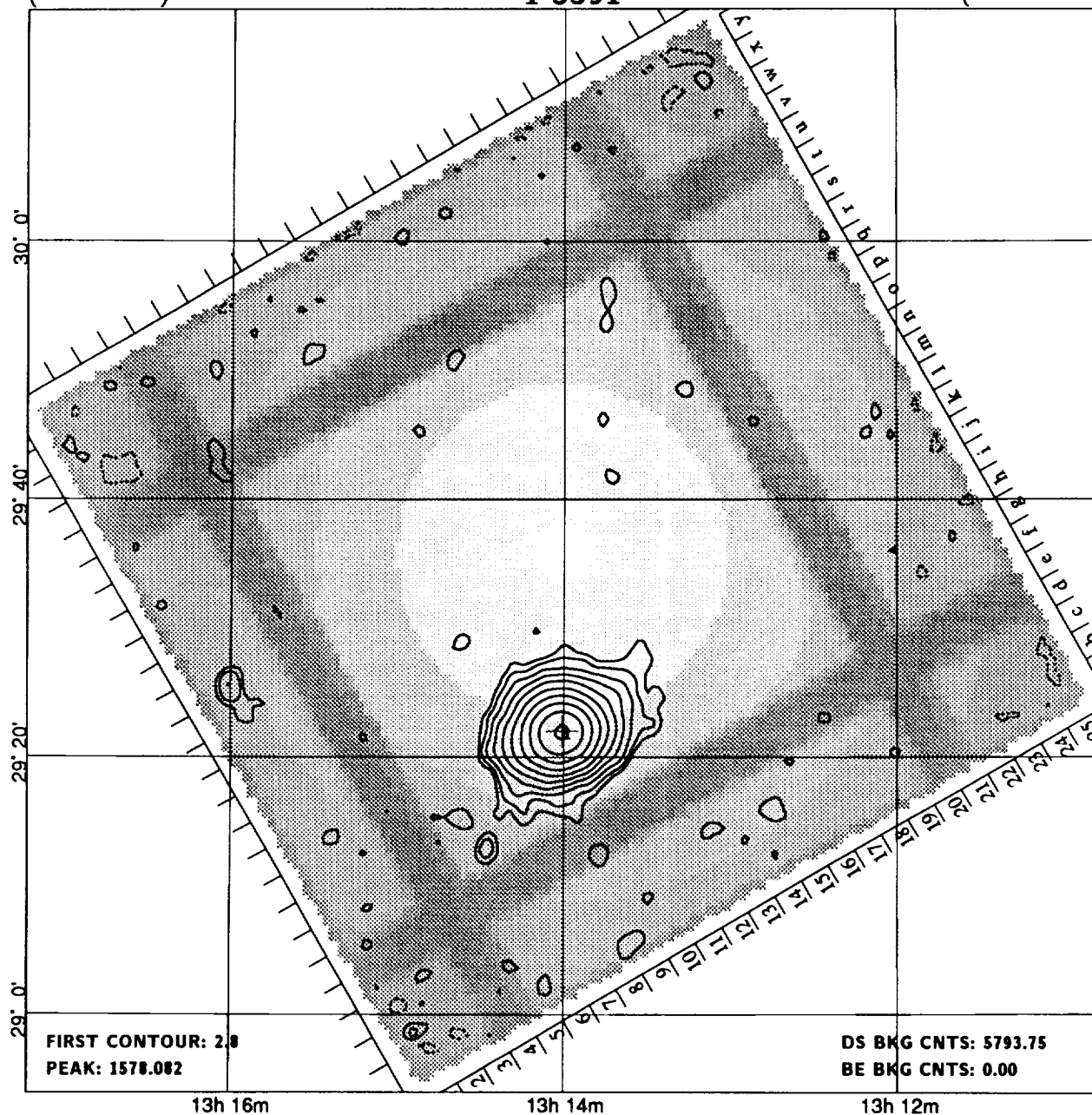
NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3009	1L	13 13 58.8	29 21 37	31	1.534	0.033	5831.7	4501.3	47.0	2.5	0	0.3	A	S

(13h 14m)

I 3391

(13h 14m)



FIELD CENTER:  $13^h 14^m 00.0^s$   $29^\circ 36' 01''$  (B1950)  
 $13^h 16^m 21.6^s$   $29^\circ 20' 12''$  (J2000)  
 $l: 56.30$   $b: 84.08$

DATE: 1978/354 - 1978/355

NH: 1.1E+20

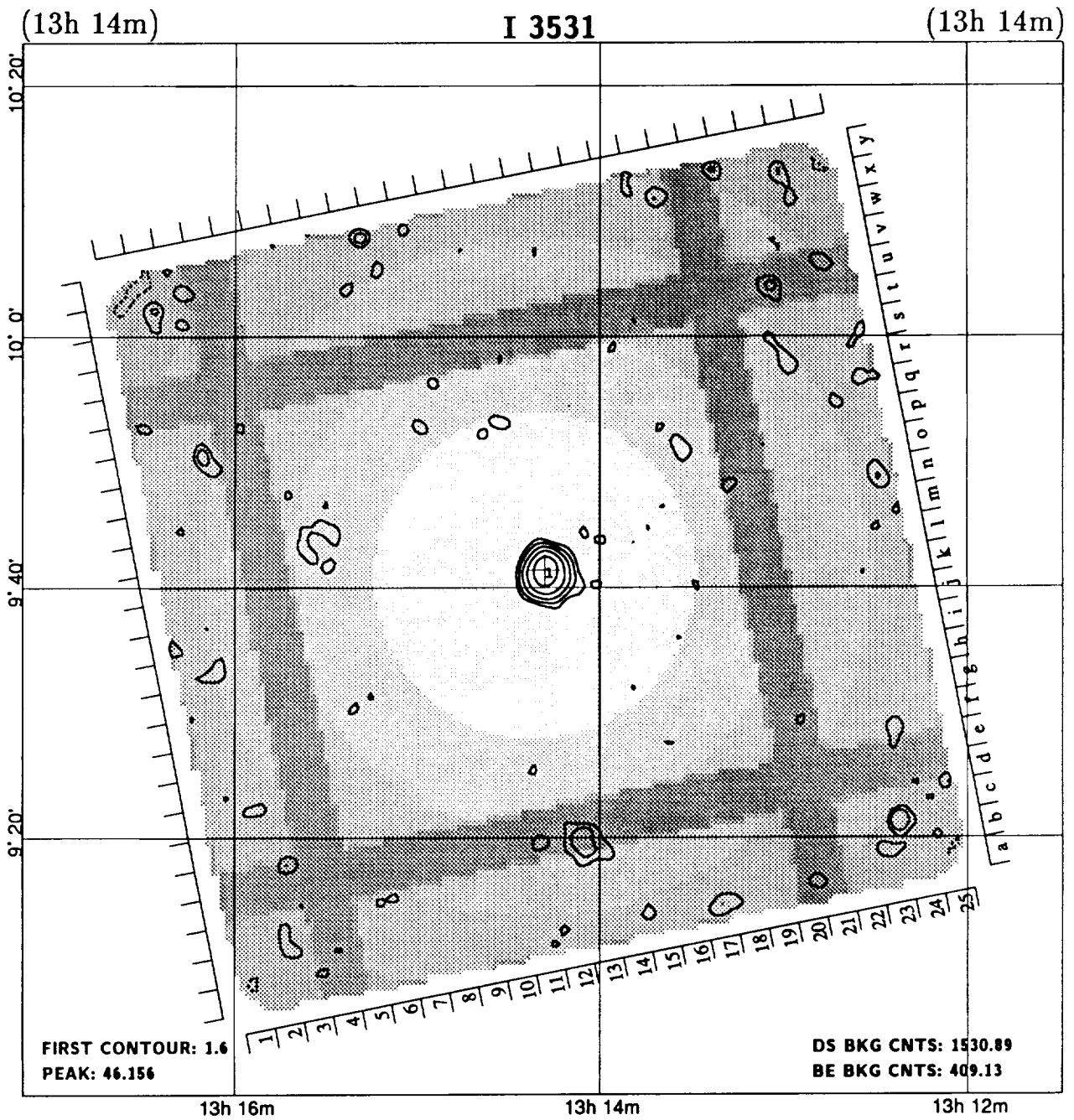
LIVETIME: 4694.9s

REF/ID:

ROLL ANGLE: -120.0°

FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3009	1L	13 14 00.6	29 22 01	37	1.390	0.034	3989.2	2583.8	40.7	2.3	0	13.8	A	S



59 VIR,CORONAL ACTIVITY OF F, G, K STARS

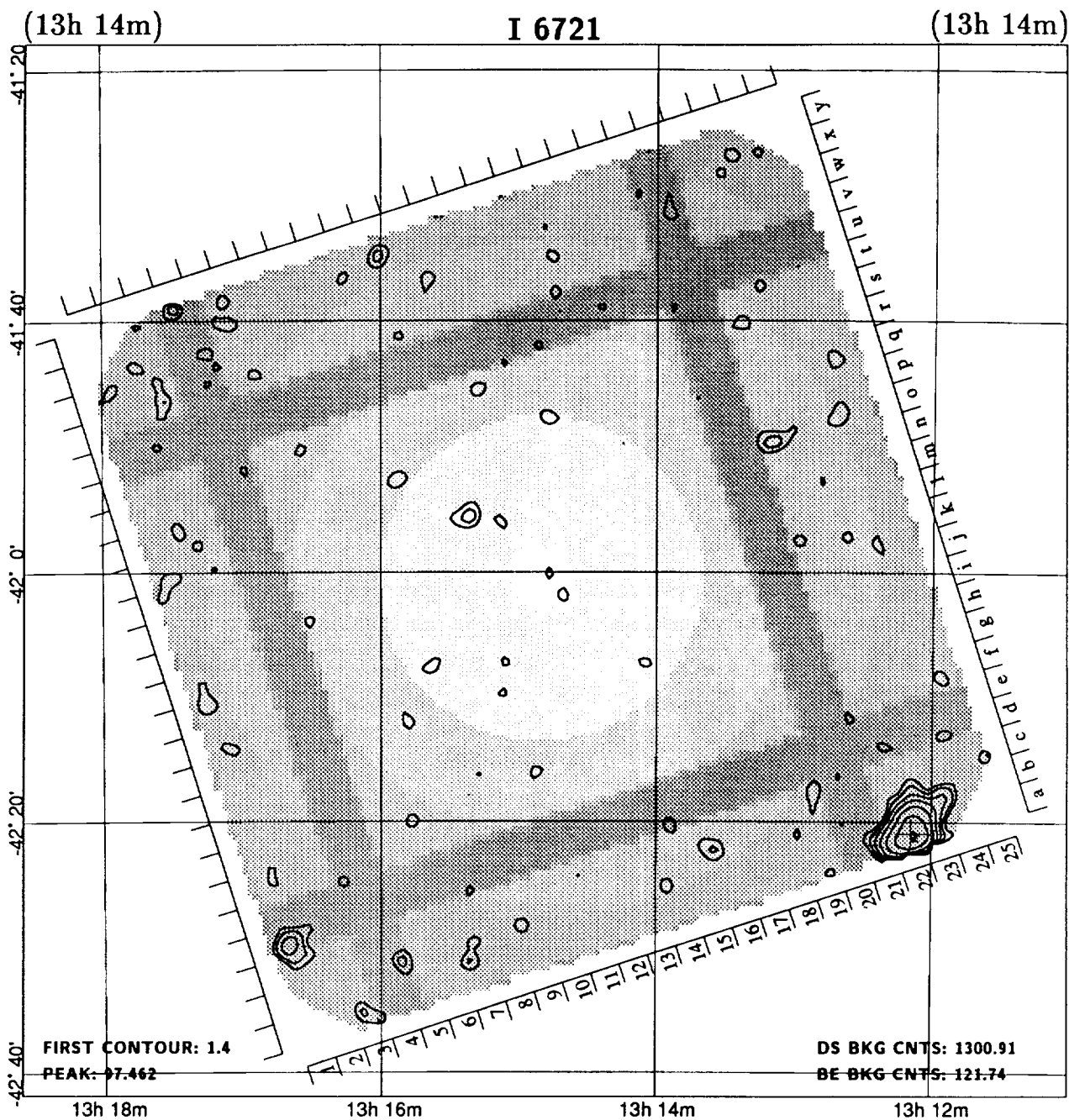
FIELD CENTER: 13<sup>h</sup>14<sup>m</sup>19.2<sup>s</sup> 09°41'23" (B1950)  
 13<sup>h</sup>16<sup>m</sup>49.3<sup>s</sup> 09°25'35" (J2000)  
 $l$ : 322.83  $b$ : 71.31

DATE: 1980/ 17 - 1980/ 17  
 LIVETIME: 1240.5s  
 ROLL ANGLE: -101.1°

NH: 1.0E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3010	1	13 14 18.0	09 41 22	31	0.203	0.015	187.7	5.3	13.5	1.3	0	0.2	H	S





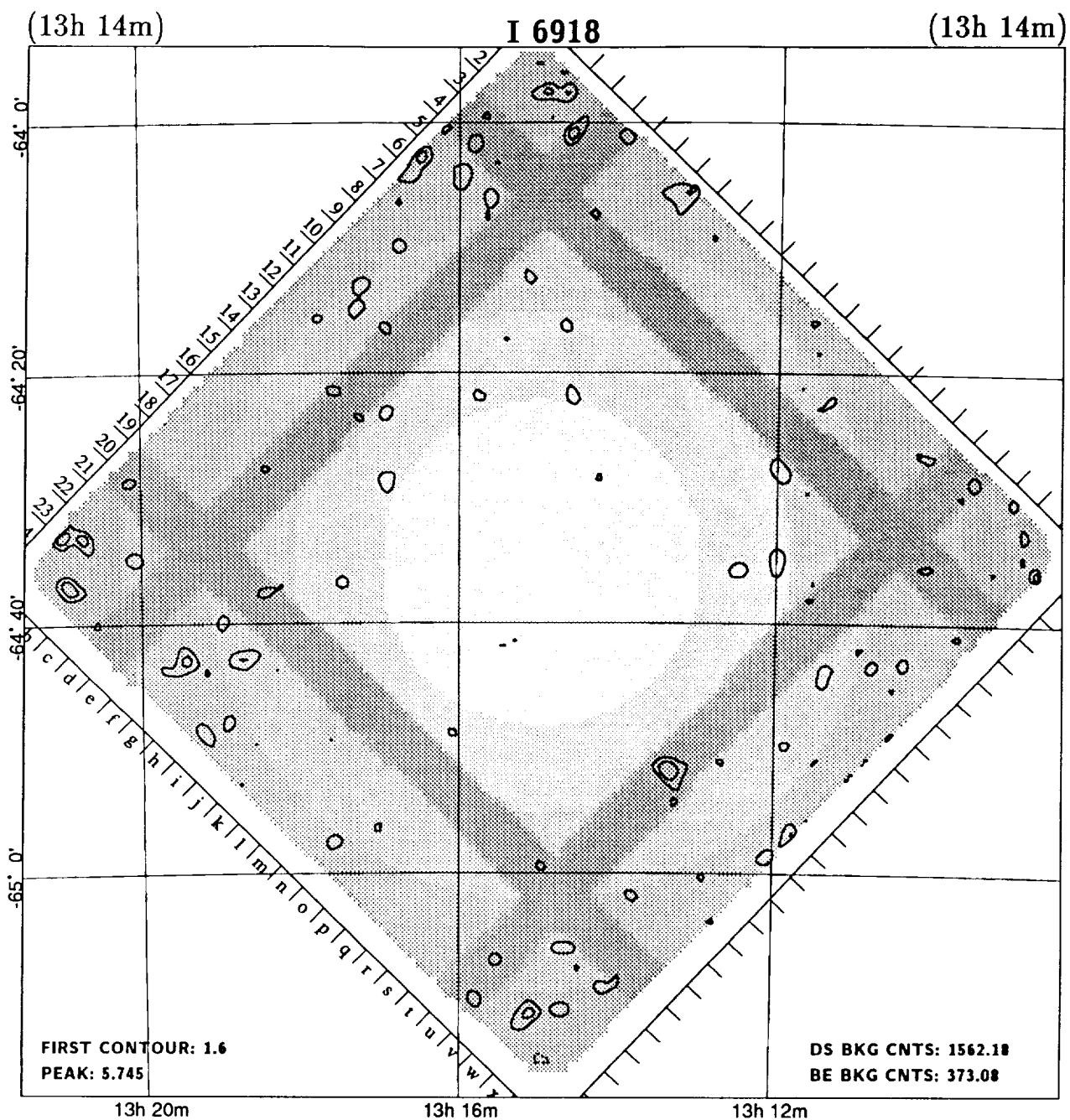
EXTENDED EMISSION FROM CEN-A RADIO LOBES, POS 1

FIELD CENTER:  $13^h 14^m 48.0^s$   $-41^\circ 59' 59''$  (B1950)  
 $13^h 17^m 41.5^s$   $-42^\circ 15' 47''$  (J2000)  
 $l: 308.11$   $b: 20.34$

DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 1054.2s  
 ROLL ANGLE:  $-107.8^\circ$

NH:  $7.0E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3002	1	13 12 09.0	-42 20 57	48	0.569	0.046	151.4	1.6	12.2	1.4	700	36.1	H

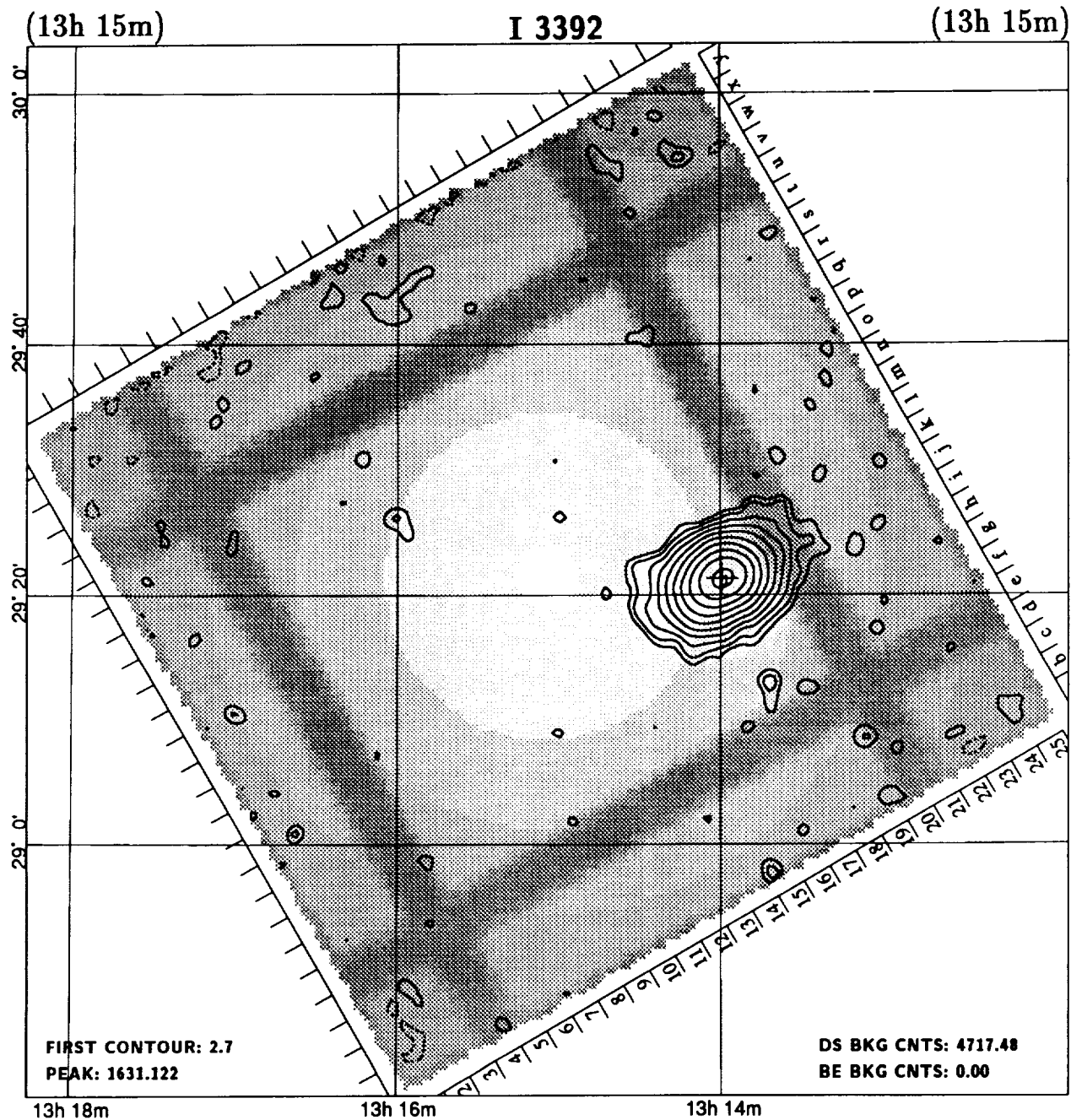


**4U 1314-64, GALACTIC SOURCE LOCATIONS & SPECTRA I**

FIELD CENTER:  $13^h 14^m 57.0^s$   $-64^\circ 35' 59''$  (B1950)  
 $13^h 18^m 17.2^s$   $-64^\circ 51' 46''$  (J2000)  
 $l: 305.78$   $b: -2.14$

DATE: 1980/238 - 1980/238  
 LIVETIME: 1265.9s  
 ROLL ANGLE:  $43.8^\circ$

NH:  $1.5E+21$   
 REF/ID: I  
 FIELD FLAGS:



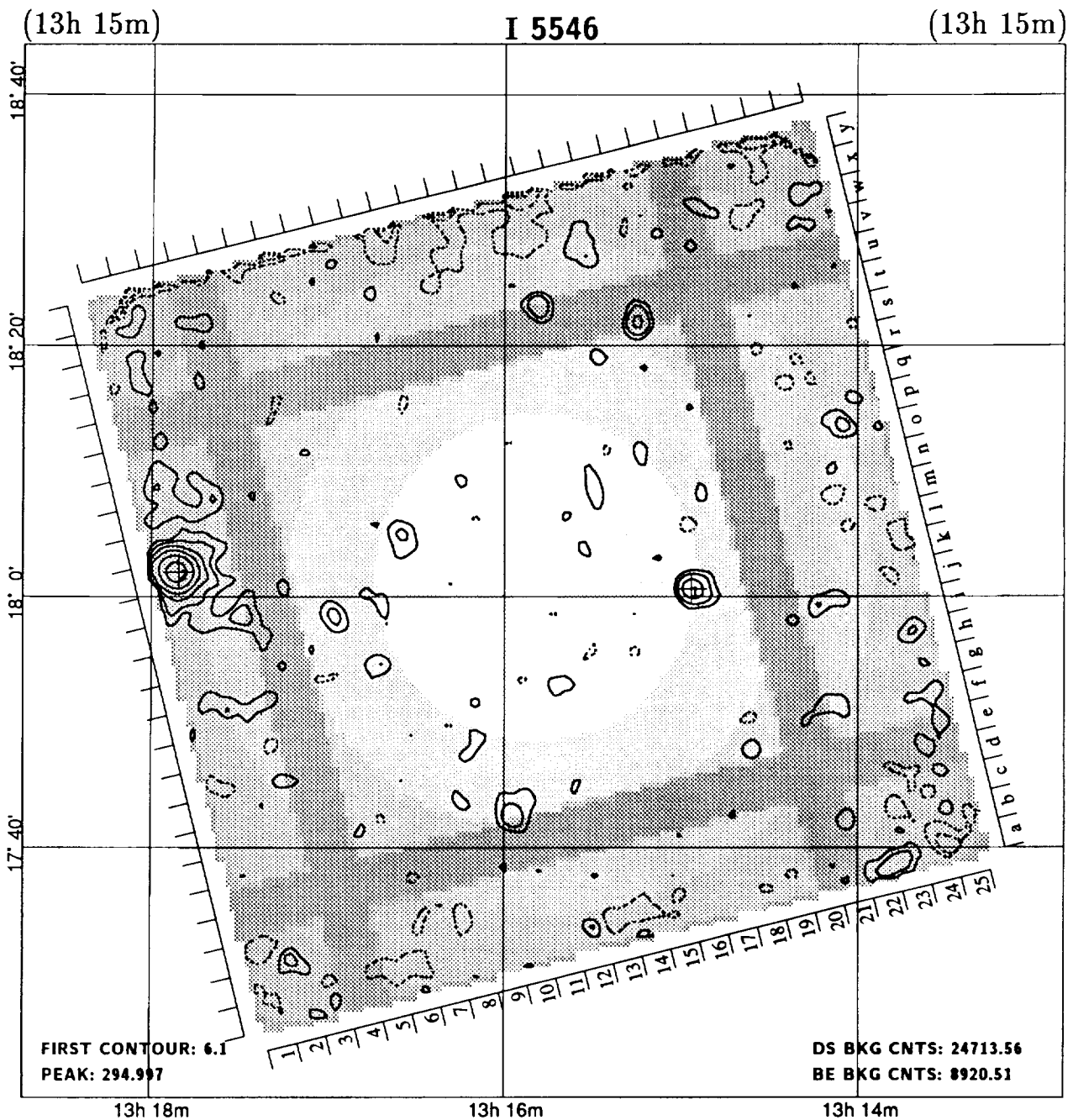
HZ 43 BORESIGHT 1

FIELD CENTER:  $13^h 15^m 04.0^s$   $29^\circ 22' 01''$  (B1950)  
 $13^h 17^m 25.5^s$   $29^\circ 06' 13''$  (J2000)  
 $l: 53.47$   $b: 83.94$

DATE: 1978/355 - 1978/355  
 LIVETIME: 3822.8s  
 ROLL ANGLE:  $-119.9^\circ$

NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3009	1L	13 13 59.4	29 21 17	37	1.848	0.043	4269.2	2444.8	43.3	2.1	0	14.0	A	S



SAO 100517 STAR (MISPOINT)

FIELD CENTER:  $13^h 15^m 47.0^s$   $18^\circ 02' 01''$  (B1950)  
 $13^h 18^m 13.6^s$   $17^\circ 46' 15''$  (J2000)  
 $l: 337.76$   $b: 78.79$

DATE: 1981/ 24 - 1981/ 25  
 LIVETIME: 20026.3s  
 ROLL ANGLE:  $-103.9^\circ$

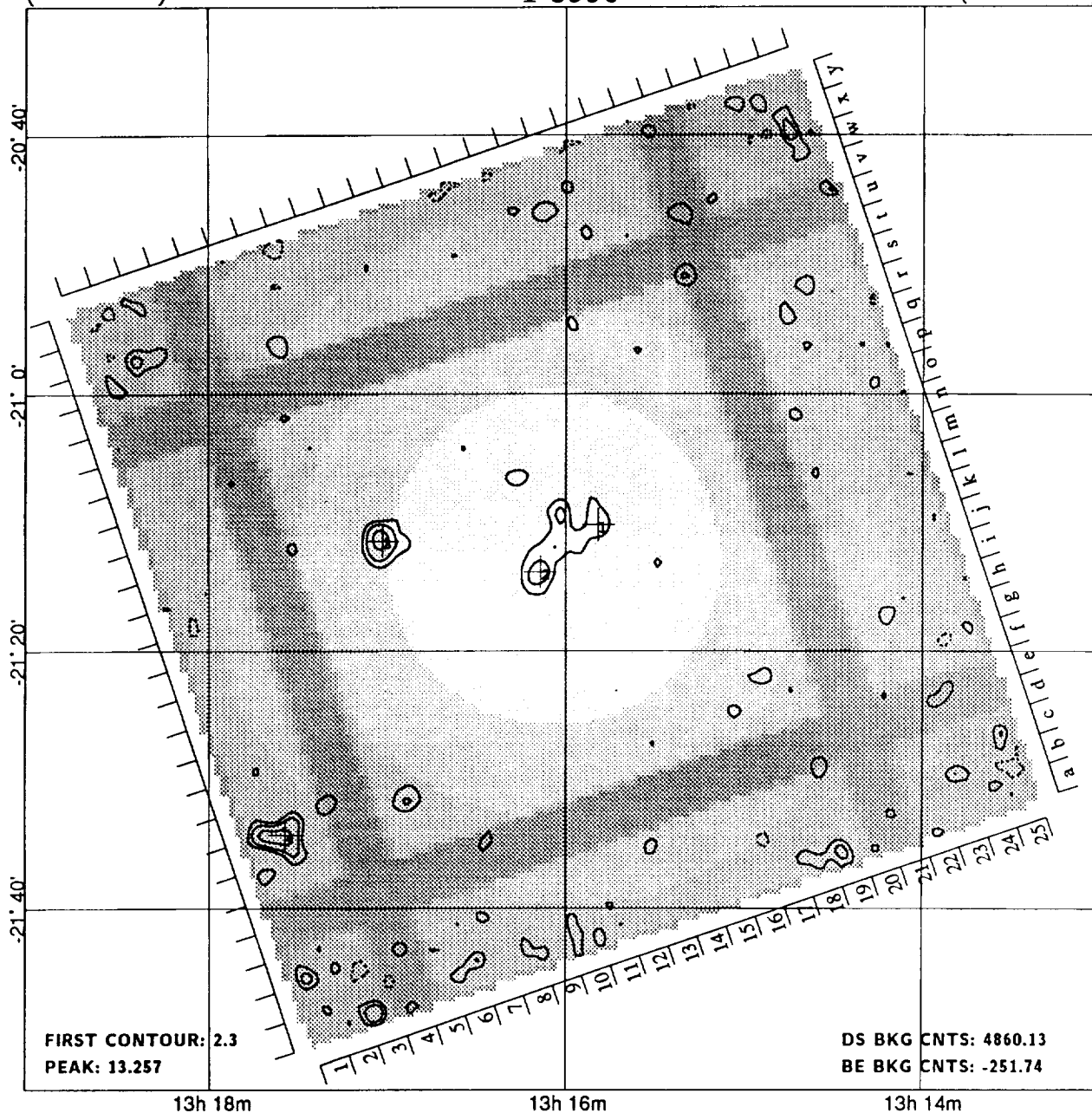
NH:  $1.8E+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
3012	1L	13 14 56.4	18 00 36	38	0.0096	0.0013	121.3	69.7	7.2	0.9	0	12.2	
3024	2L	13 17 50.8	18 01 57	47	0.0736	0.0040	539.6	98.4	18.5	1.4	100	29.4	

(13h 16m)

I 8996

(13h 16m)



DISTANCE 4 ABELL CLUSTERS: ABELL 1709

FIELD CENTER:  $13^{\text{h}}16^{\text{m}}01.0^{\text{s}}$   $-21^{\circ}12'06''$  (B1950)  
 $13^{\text{h}}18^{\text{m}}43.4^{\text{s}}$   $-21^{\circ}27'52''$  (J2000)  
 $l: 311.35$   $b: 40.96$

DATE: 1980/363 - 1980/363  
 LIVETIME: 3938.3s  
 ROLL ANGLE:  $-108.7^{\circ}$

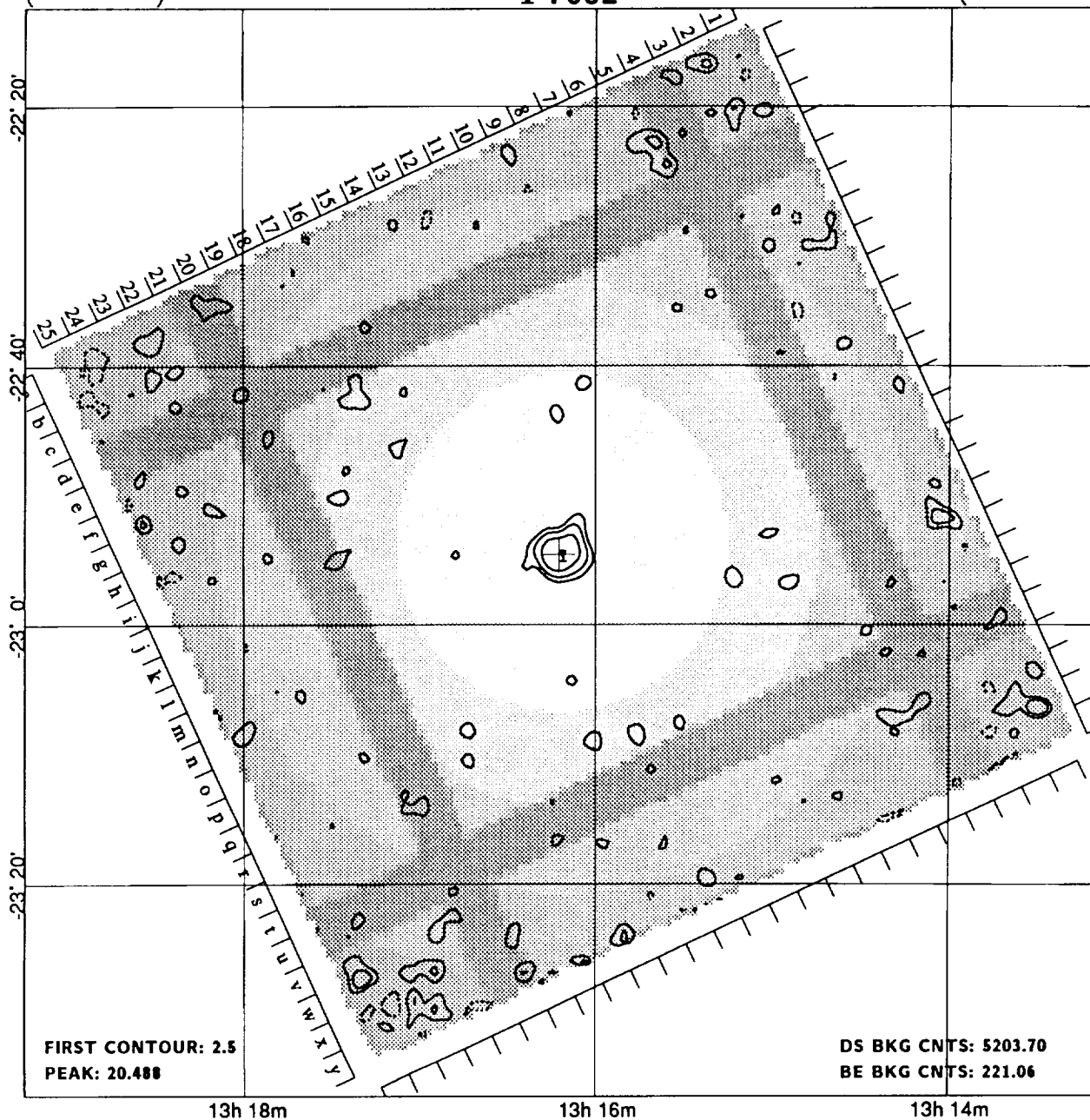
NH:  $8.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3013	1	13 15 49.0	-21 10 11	41	0.0067	0.0019	19.0	10.0	3.5	3.6	0	2.9		
3014	2	13 16 08.4	-21 13 50	36	0.0101	0.0022	29.4	10.6	4.6	2.6	0	3.0	H	
3020	3	13 17 01.6	-21 11 27	41	0.0153	0.0028	37.0	10.0	5.4	1.0	0	14.3	H	
3023	4	13 17 34.6	-21 34 17	53	0.0171	0.0040	23.5	6.5	4.3	1.3	0	31.1	H	

(13h 16m)

I 7682

(13h 16m)



## GAM HYA, CORONAE/WINDS DIVISION AMONG LATE-TYPE STARS

FIELD CENTER:  $13^h 16^m 11.9^s$   $-22^\circ 54' 29''$  (B1950)  
 $13^h 18^m 55.1^s$   $-23^\circ 10' 15''$  (J2000)  
 $l: 311.10$   $b: 39.26$

DATE: 1980/209 - 1980/210  
 LIVETIME: 4216.7s  
 ROLL ANGLE:  $65.1^\circ$

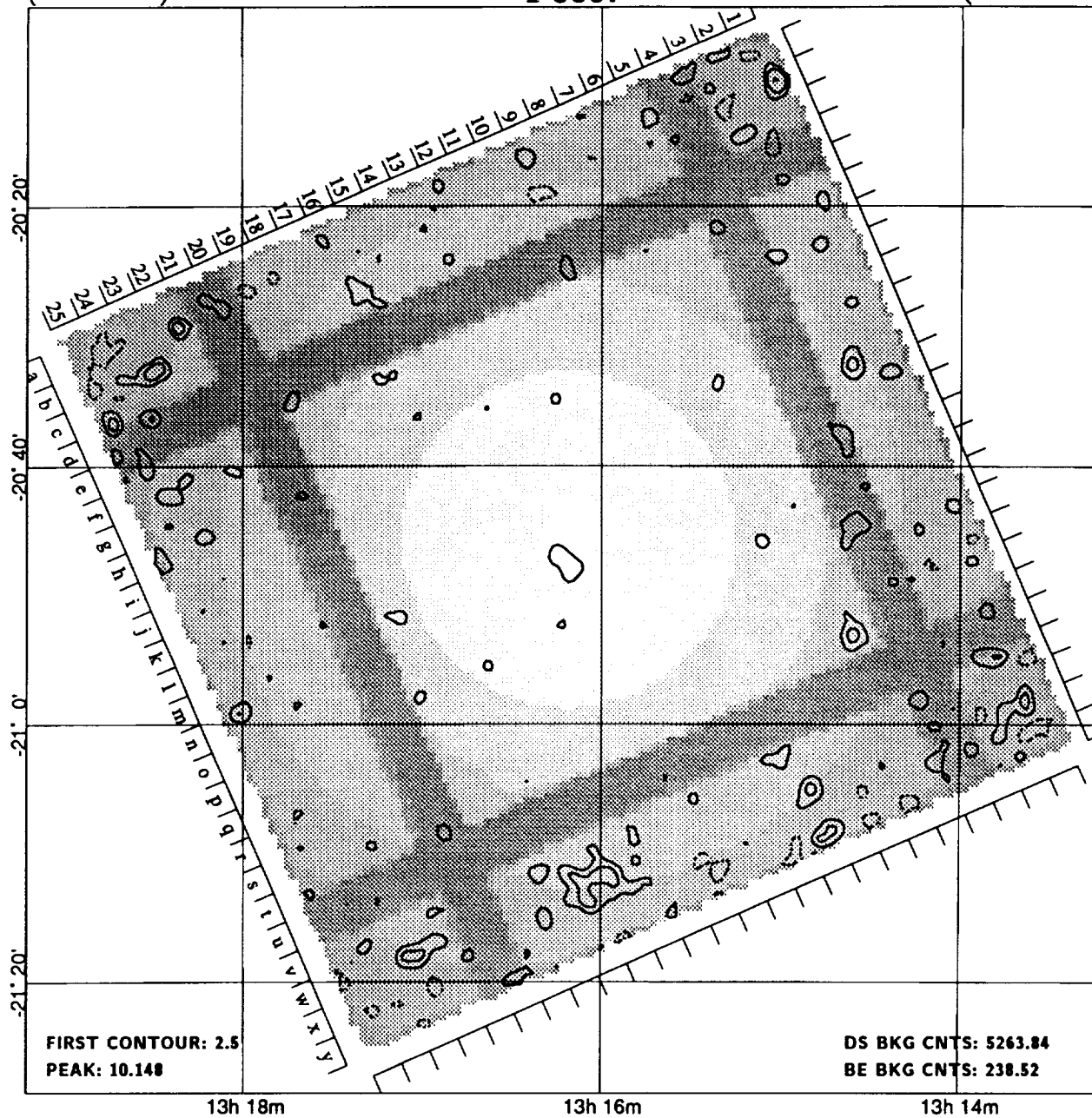
NH:  $8.0E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3016	1	13 16 12.4	-22 54 32	31	0.0330	0.0035	103.5	13.5	9.6	1.4	0	0.2	H	

(13h 16m)

I 5807

(13h 16m)



NORMAL GALAXIES: N5068

FIELD CENTER:  $13^{\text{h}}16^{\text{m}}12.0^{\text{s}}$   $-20^{\circ}46'35''$  (B1950)  
 $13^{\text{h}}18^{\text{m}}54.2^{\text{s}}$   $-21^{\circ}02'21''$  (J2000)  
 $l: 311.48$   $b: 41.38$

DATE: 1980/204 - 1980/204  
 LIVETIME: 4265.4s  
 ROLL ANGLE:  $66.4^{\circ}$

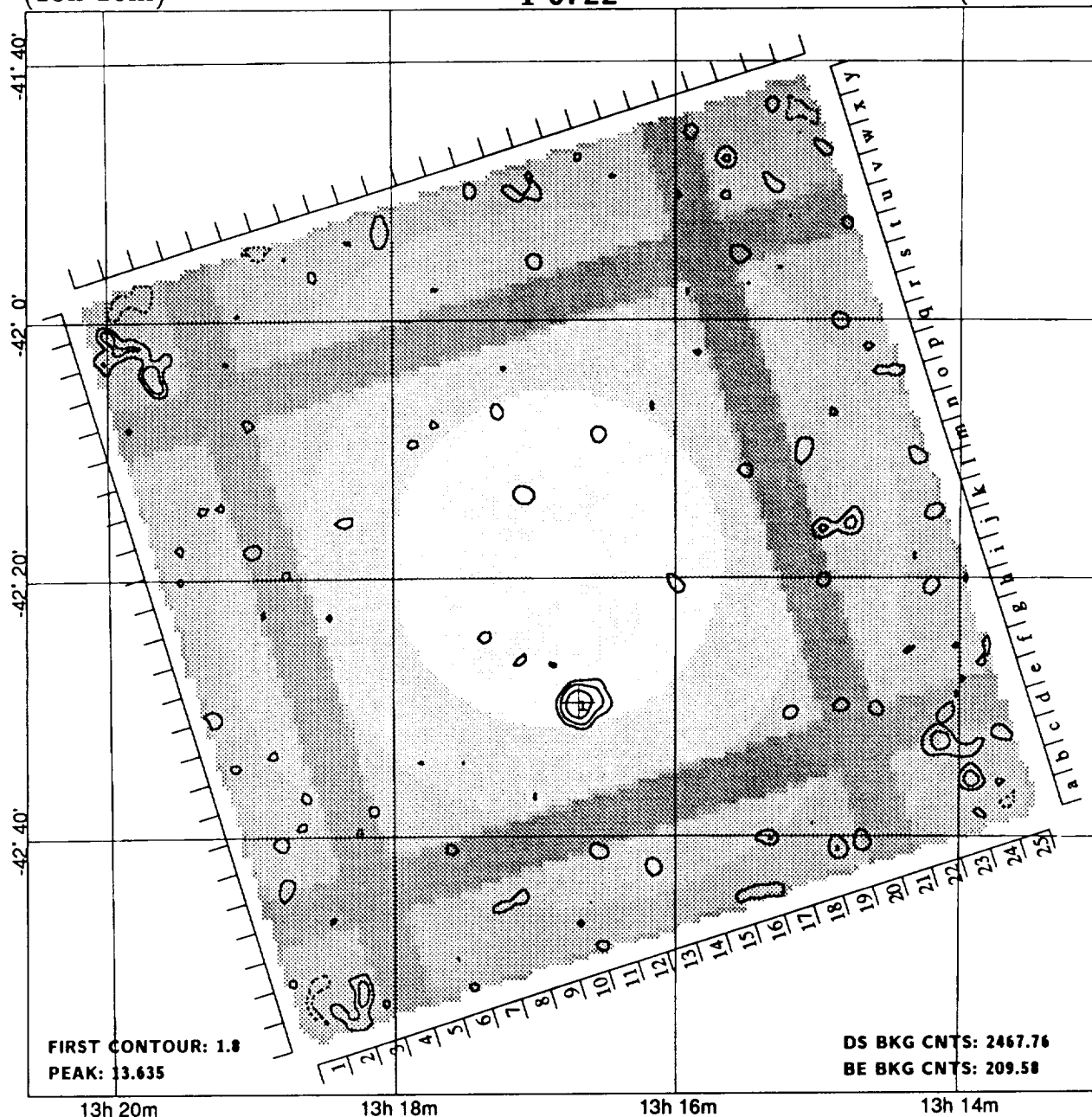
NH:  $7.9\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:



(13h 16m)

I 6722

(13h 16m)



## EXTENDED EMISSION FROM CEN-A RADIO LOBES, POS 2

FIELD CENTER:  $13^h 16^m 48.0^s$   $-42^\circ 17' 59''$  (B1950)  
 $13^h 19^m 42.2^s$   $-42^\circ 33' 44''$  (J2000)  
 $l: 308.47$   $b: 20.01$

DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 1999.7s  
 ROLL ANGLE:  $-107.4^\circ$

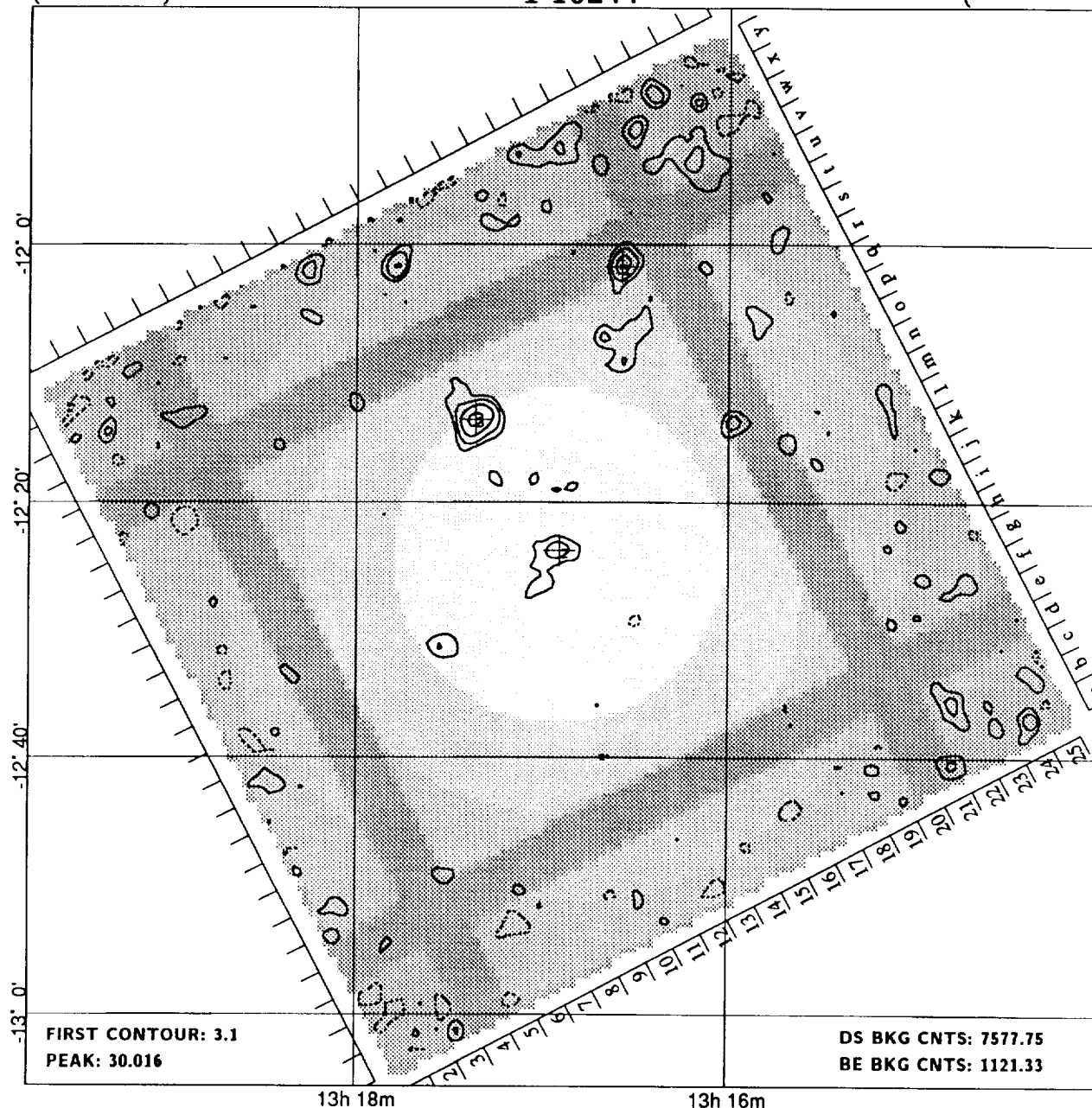
NH:  $8.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3018	1	13 16 41.2	-42 29 37	41	0.0369	0.0056	48.1	5.9	6.5	1.2	0	11.4	H	

(13h 16m)

I 10244

(13h 16m)



## N 5077: E &amp; SO GALAXIES W/ COMPACT NUCLEAR RADIO CORES

FIELD CENTER:  $13^h 16^m 52.9^s$   $-12^\circ 23' 37''$  (B1950)  
 $13^h 19^m 31.6^s$   $-12^\circ 39' 22''$  (J2000)  
 $l: 313.55$   $b: 49.64$

DATE: 1981/ 32 - 1981/ 32  
 LIVETIME: 6140.5s  
 ROLL ANGLE:  $-117.6^\circ$

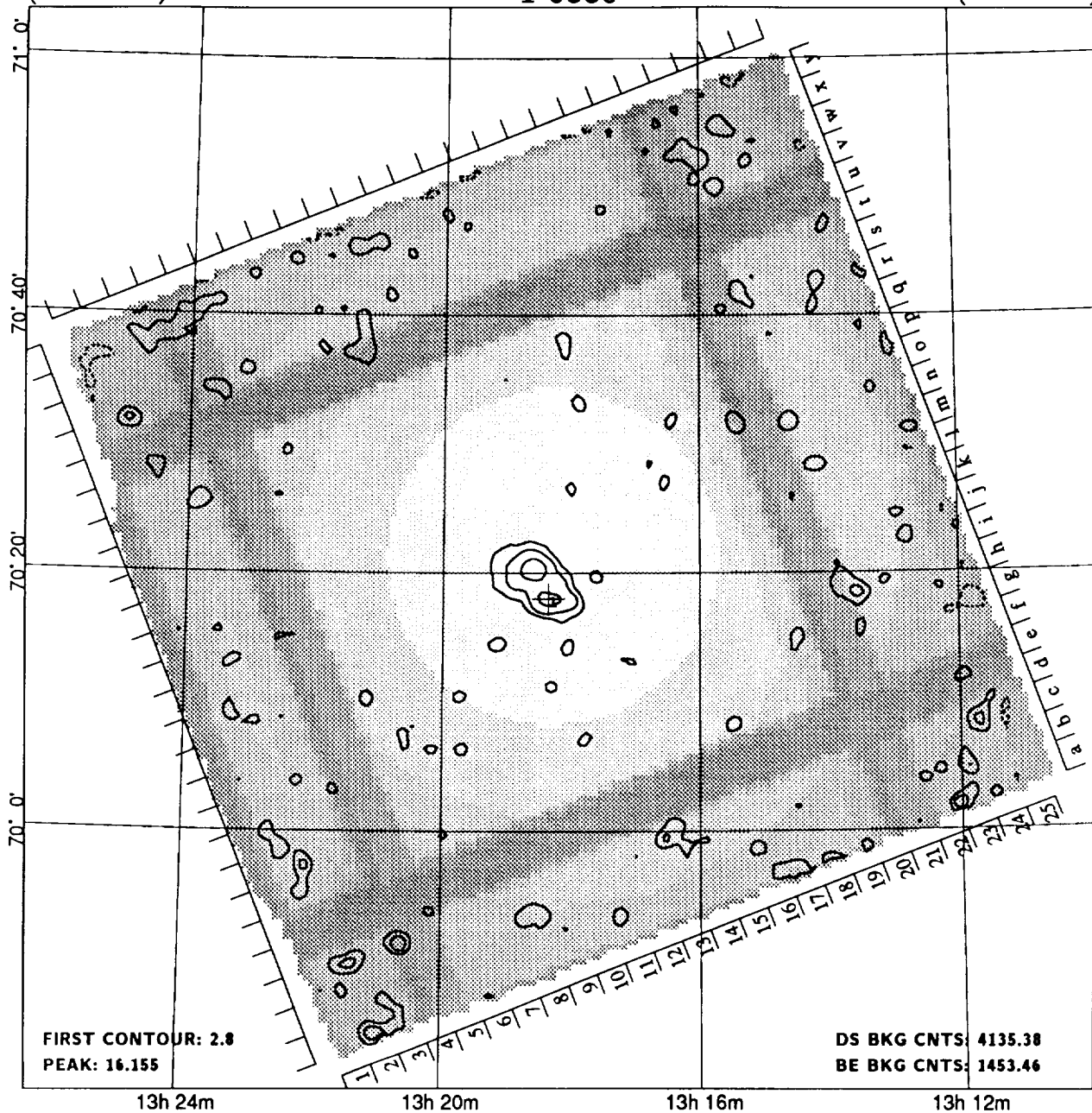
NH:  $3.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3017	1	13 16 34.7	-12 01 42	51	*0.0119	0.0024	33.9	14.1	4.9	0.9	1007	22.2	H	
3019	2	13 16 54.5	-12 23 47	36	0.0070	0.0016	32.1	21.9	4.4	1.2	0	0.4	H	G
3022	3	13 17 21.7	-12 13 39	38	0.0230	0.0027	89.1	16.9	8.6	1.2	0	12.0	H	

(13h 18m)

I 6880

(13h 18m)



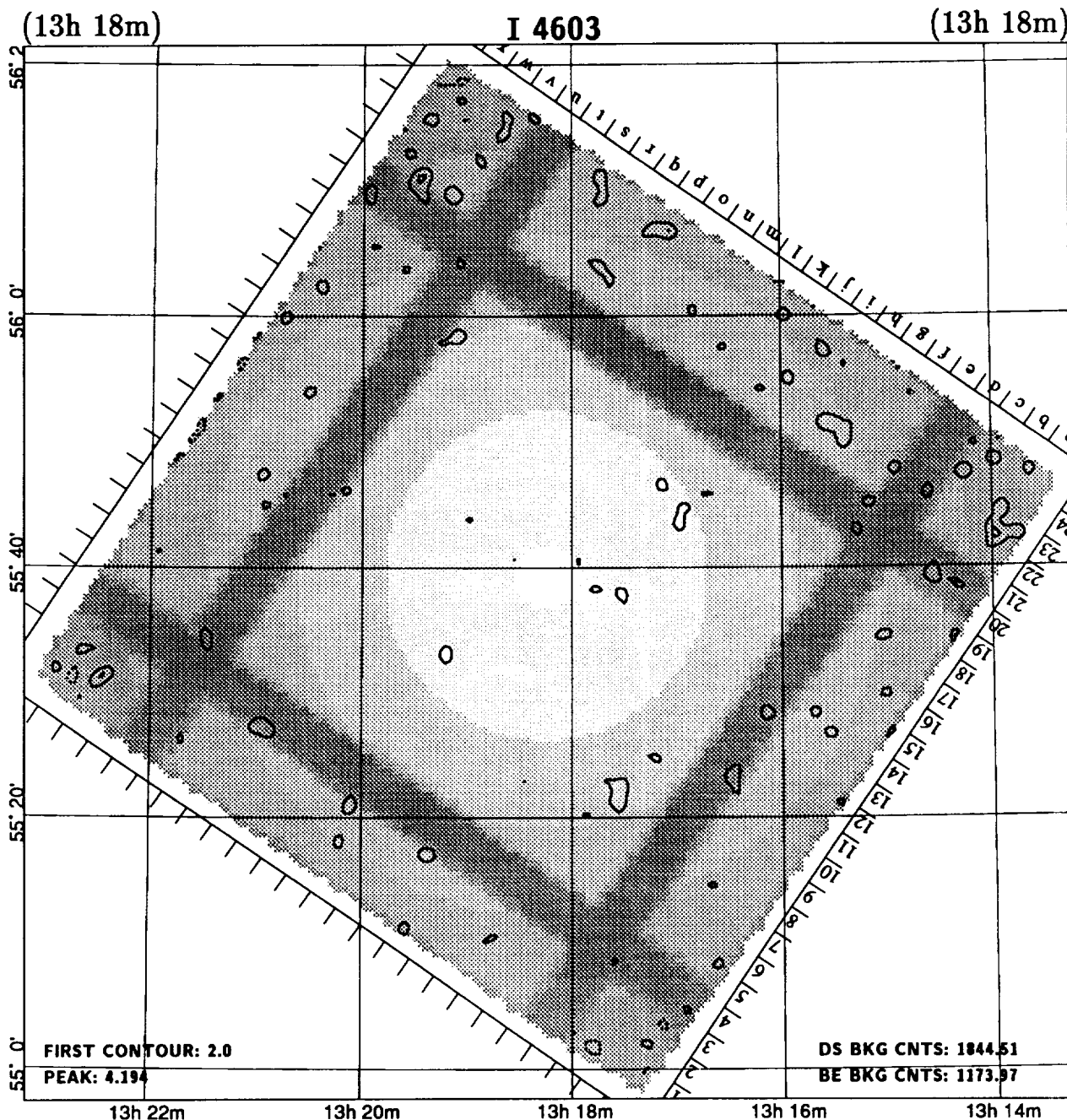
A1722, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $13^h 18^m 12.0^s$   $70^\circ 21' 59''$  (B1950)  
 $13^h 19^m 42.9^s$   $70^\circ 06' 16''$  (J2000)  
 $l: 119.42$   $b: 46.83$

DATE: 1980/358 - 1980/358  
 LIVETIME: 3351.0s  
 ROLL ANGLE:  $-111.4^\circ$

NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT	FLD	RA	DEC	$\pm$	COUNT	$\pm$	NET	BKG	S/N	SIZE	RECO	R'	SRC	ID
#	#	(1950)	(1950)	"	RATE		CTS	CTS		COR			FLG	
3026	1L	13 18 21.4	70 17 59	35	0.0170	0.0044	41.7	36.3	3.8	2.9	0	4.1		CLG

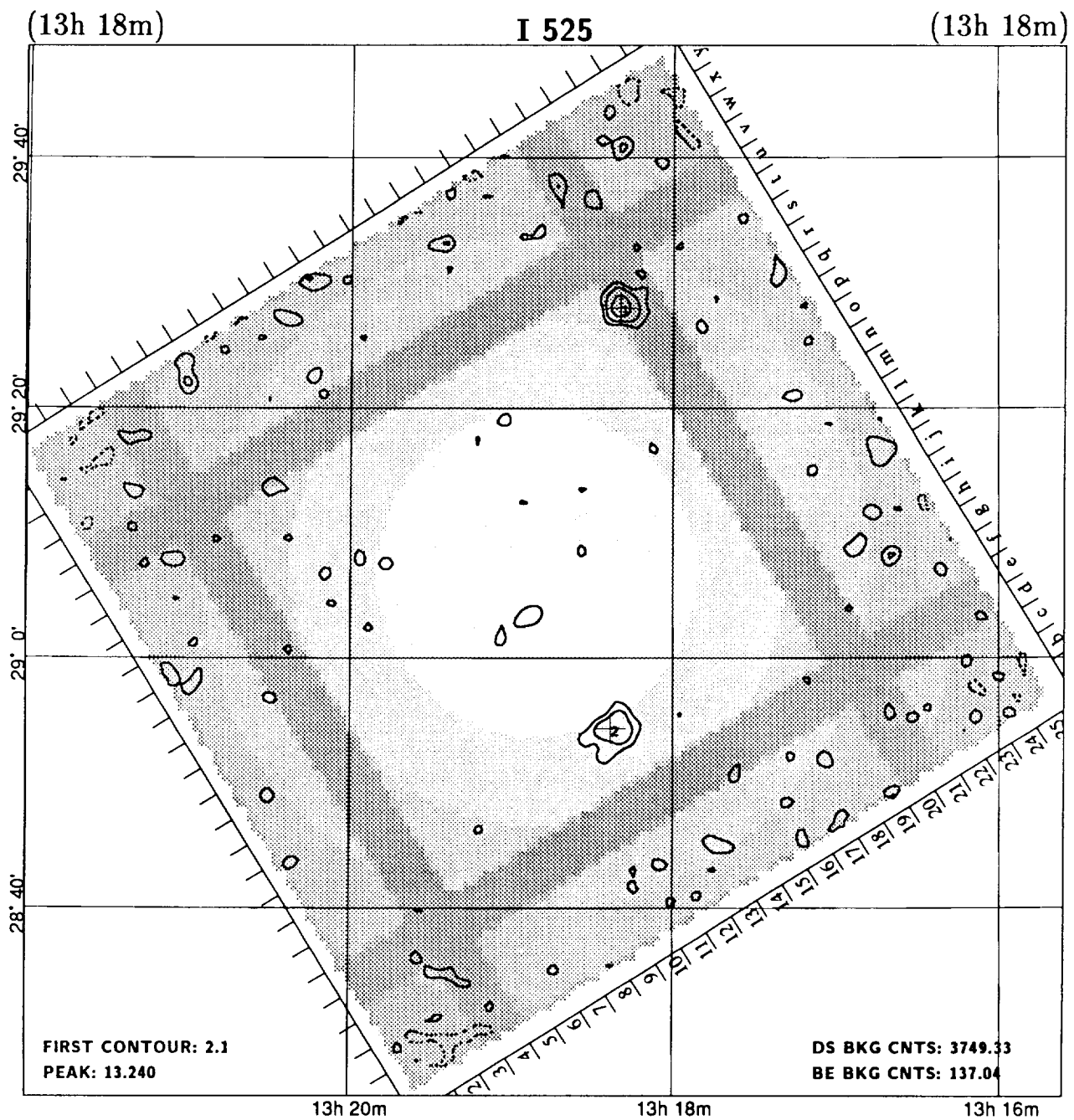


**MKN 252: S-TYPE MARKARIAN GALAXY**

FIELD CENTER:  $13^{\text{h}}18^{\text{m}}14.4^{\text{s}}$   $55^{\circ}39'39''$  (B1950)  
 $13^{\text{h}}20^{\text{m}}15.2^{\text{s}}$   $55^{\circ}23'56''$  (J2000)  
 $l$ : 114.42  $b$ : 61.25

DATE: 1979/325 - 1979/325  
 LIVETIME: 1494.7s  
 ROLL ANGLE:  $-145.7^{\circ}$

NH:  $1.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



TON 155/156 (QSO 1318+291) QUASAR SURVEY

FIELD CENTER:  $13^h 18^m 48.0^s$   $29^\circ 06' 59''$  (B1950)  
 $13^h 21^m 09.1^s$   $28^\circ 51' 18''$  (J2000)  
 $l: 49.41$   $b: 83.22$

DATE: 1978/352 - 1978/352  
 LIVETIME: 3038.2s  
 ROLL ANGLE:  $-121.8^\circ$

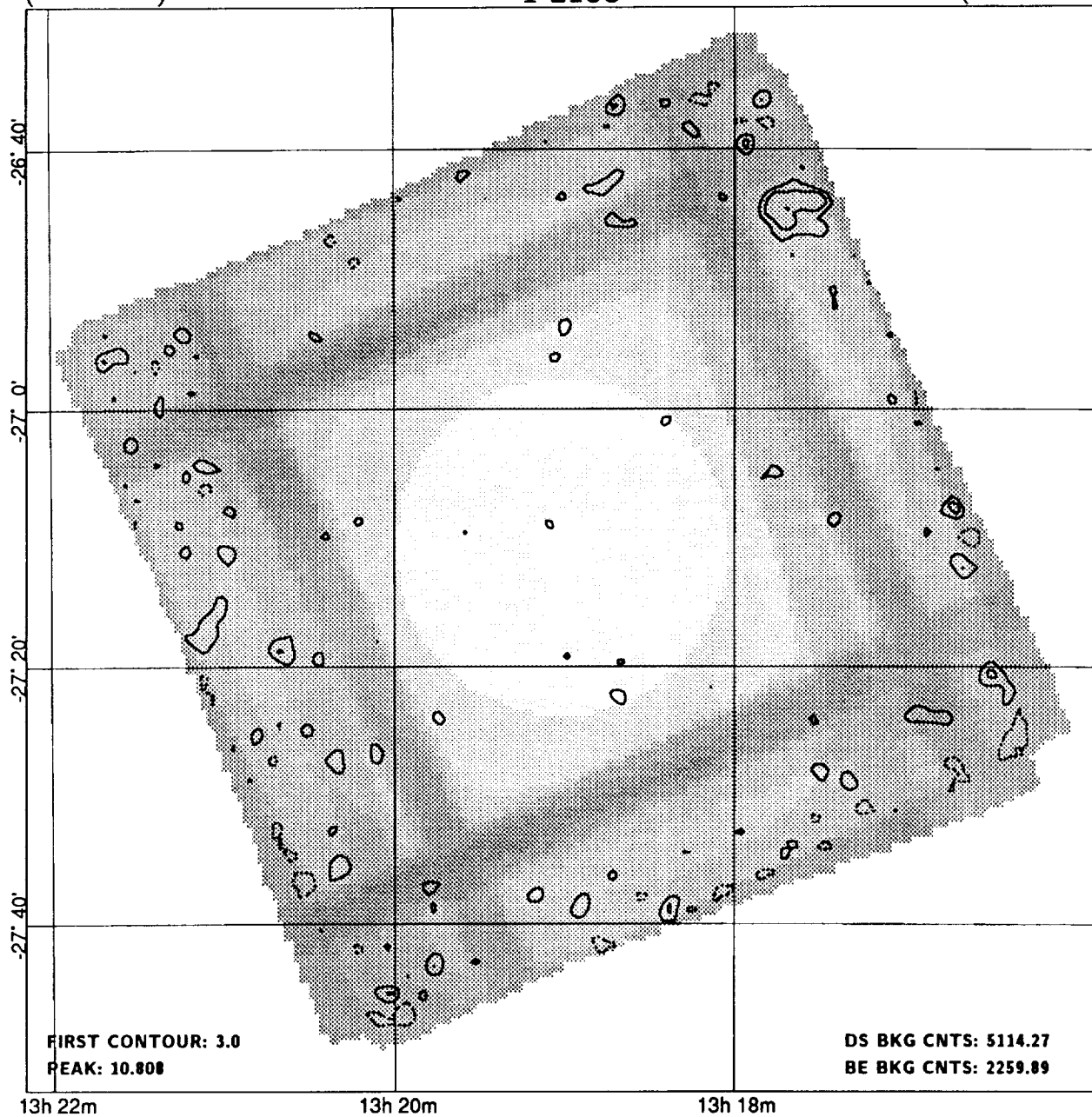
NH:  $1.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3025	1	13 18 19.7	29 28 00	51	*0.0219	0.0042	31.6	5.4	5.2	1.1	1007	21.8	H	
3027	2	13 18 23.1	28 54 25	42	0.0178	0.0034	33.0	8.0	5.2	1.5	0	14.4	H	

(13h 19m)

I 2138

(13h 19m)

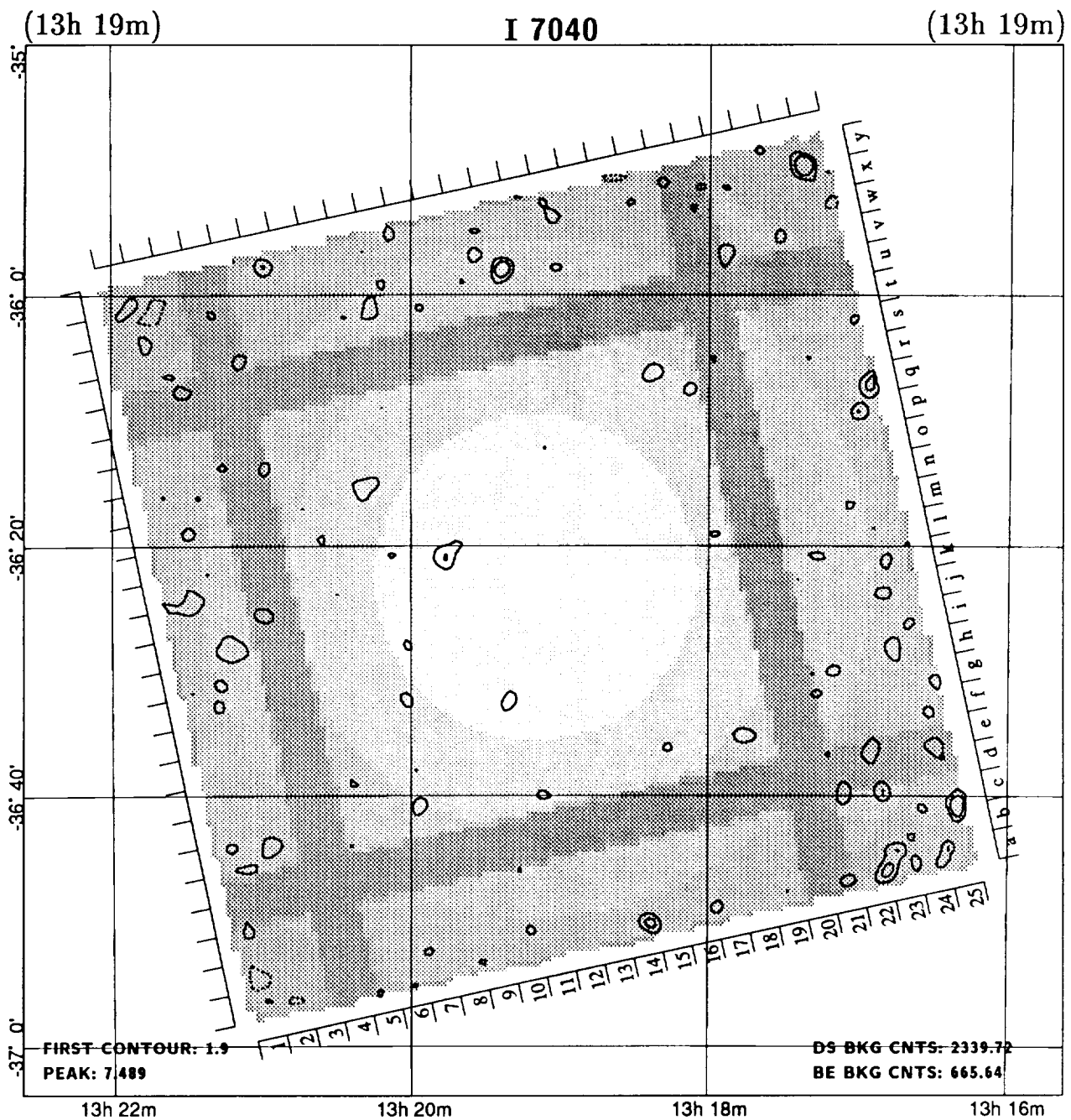


## X-RAY SURVEY OF NORMAL GALAXIES: NGC5101

FIELD CENTER:  $13^{\text{h}}19^{\text{m}}00.0^{\text{s}}$   $-27^{\circ}10'59''$  (B1950)  
 $13^{\text{h}}21^{\text{m}}45.6^{\text{s}}$   $-27^{\circ}26'41''$  (J2000)  
 $l: 311.14$   $b: 34.94$

DATE: 1979/ 8 - 1980/209  
 LIVETIME: 4144.2s

NH:  $5.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L



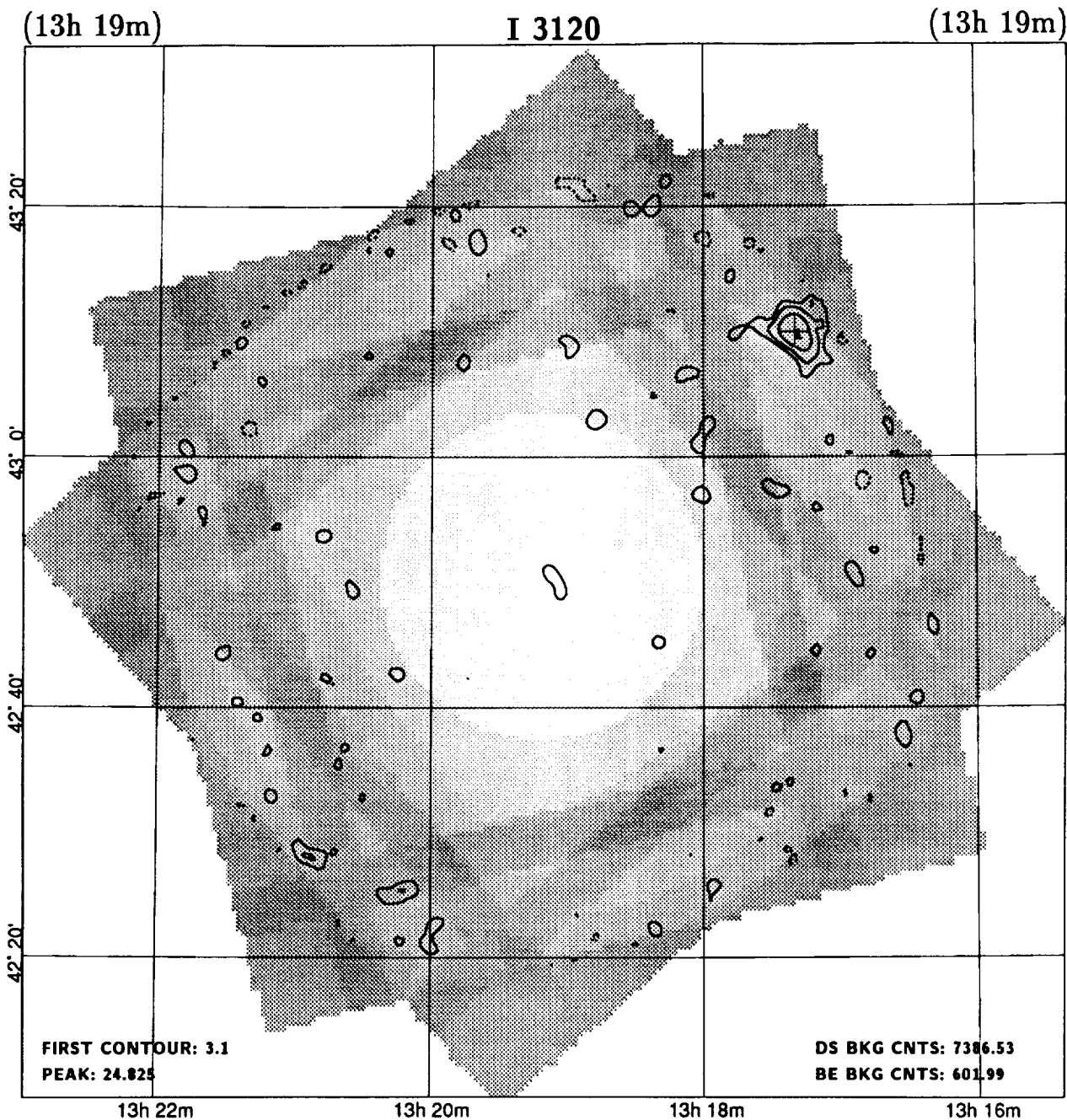
NGC 5102, EARLY GALAXY SURVEY

FIELD CENTER:  $13^{\text{h}}19^{\text{m}}07.0^{\text{s}}$   $-36^{\circ}22'05''$  (B1950)  
 $13^{\text{h}}21^{\text{m}}57.8^{\text{s}}$   $-36^{\circ}37'46''$  (J2000)  
 $l$ : 309.73  $b$ : 25.84

DATE: 1980/ 10 - 1980/ 10  
 LIVETIME: 1896.0s  
 ROLL ANGLE:  $-102.2^{\circ}$

NH:  $4.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:





**3C 285: OPTICAL OBJECTS IN THE LOBES OF RADIO GALAXIES**

FIELD CENTER:  $13^{\text{h}}19^{\text{m}}10.0^{\text{s}}$   $42^{\circ}50'59''$  (B1950)  
 $13^{\text{h}}21^{\text{m}}22.6^{\text{s}}$   $42^{\circ}35'18''$  (J2000)  
 $l: 103.34$   $b: 73.38$

DATE: 1979/168 - 1980/ 8  
 LIVETIME: 5985.5s

NH:  $1.3\text{E}+20$

REF/ID:

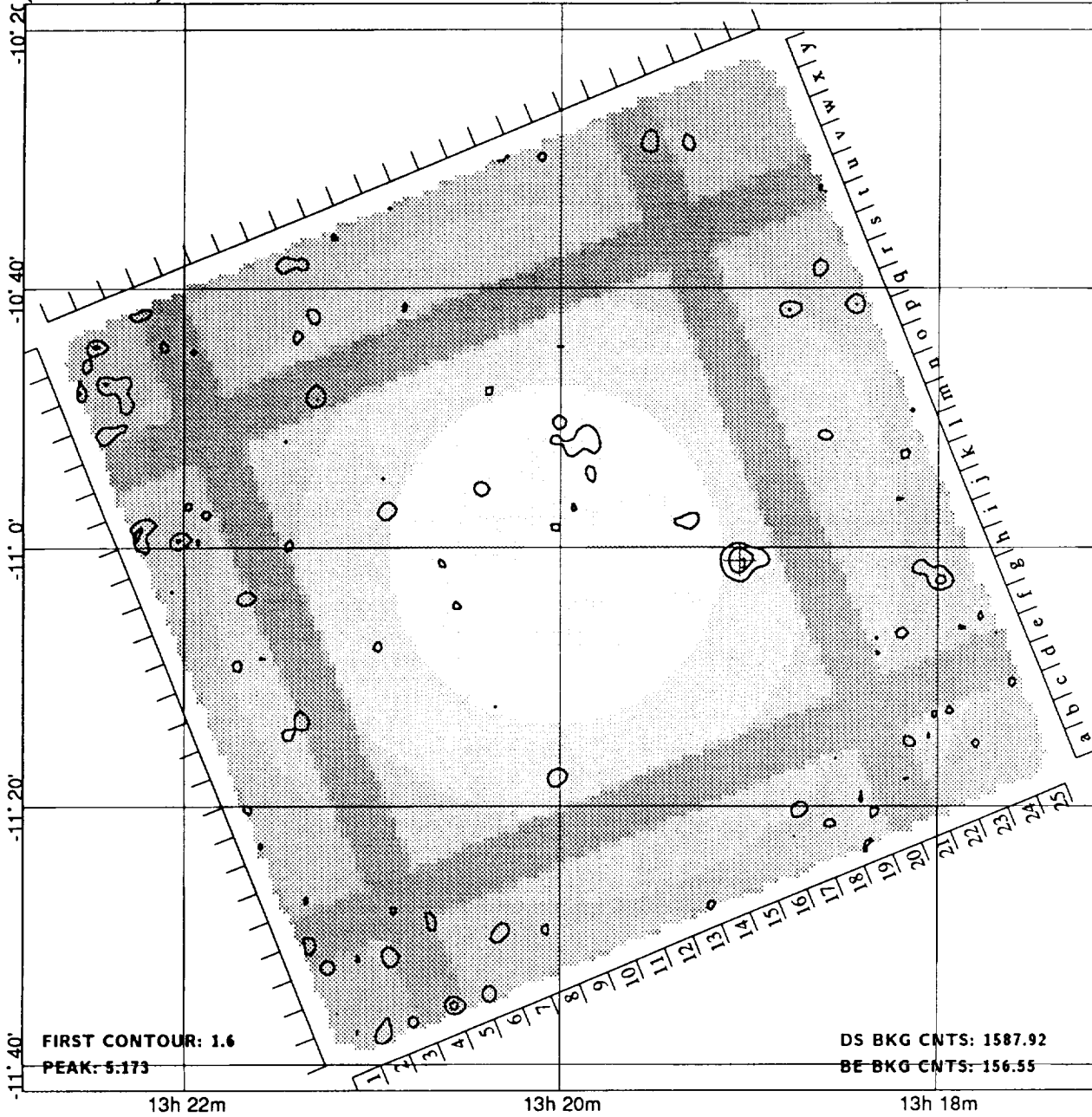
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3021	1	13 17 19.7	43 09 58	50	0.0248	0.0036	56.1	11.9	6.8	1.6	100	27.7	H	

(13h 20m)

I 4981

(13h 20m)



## SOFT SOURCE NEAR ALPHA VIR #1

FIELD CENTER:  $13^h 20^m 00.0^s$   $-10^\circ 59' 59''$  (B1950)  
 $13^h 22^m 38.3^s$   $-11^\circ 15' 39''$  (J2000)  
 $l: 315.11$   $b: 50.87$

DATE: 1980/ 17 - 1980/ 17  
 LIVETIME: 1286.7s  
 ROLL ANGLE:  $-112.2^\circ$

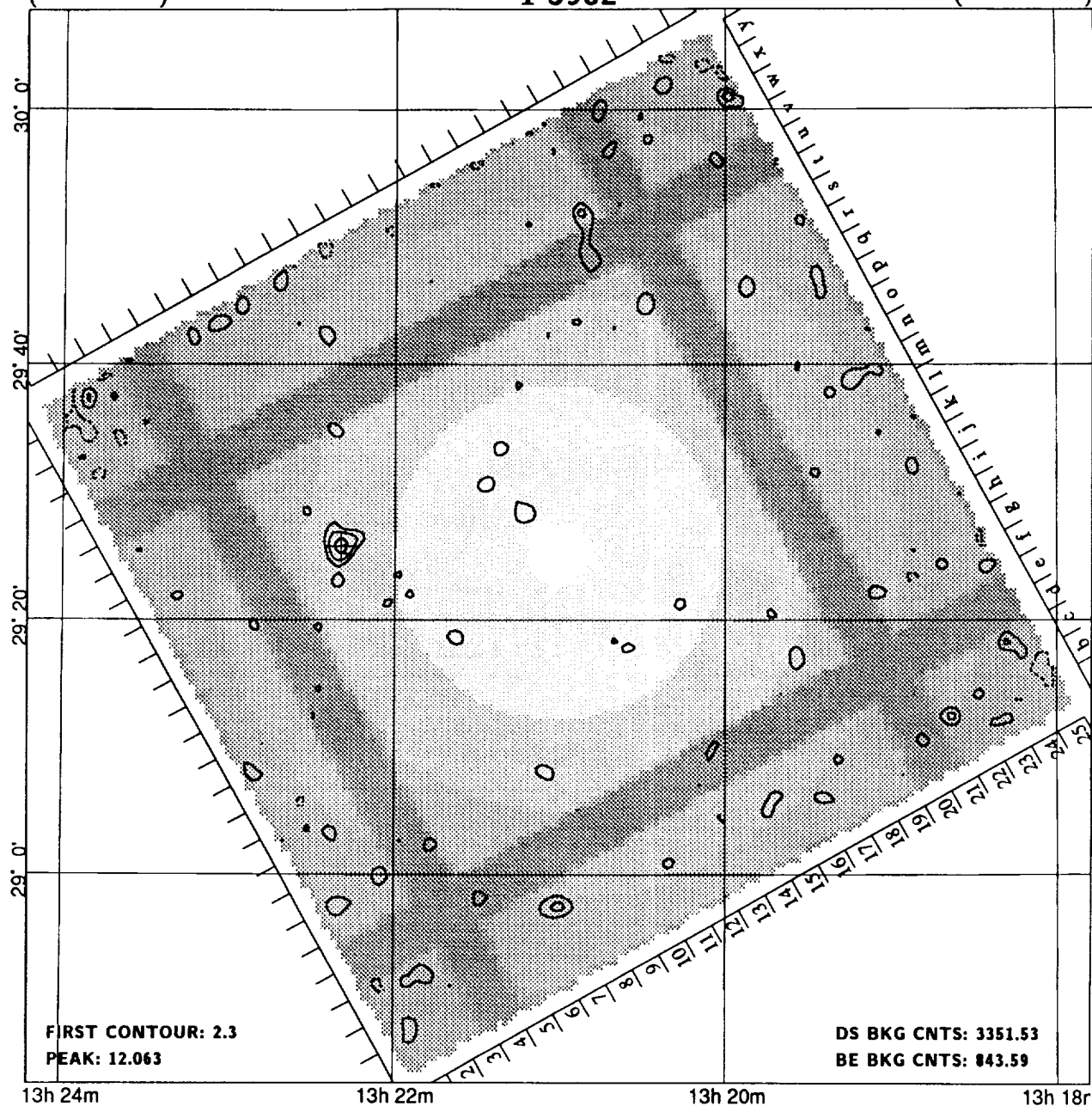
NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3028	1	13 19 02.8	-11 01 01	46	0.0217	0.0058	16.7	3.3	3.7	0.9	0	14.0	H	

(13h 21m)

I 3982

(13h 21m)



## TON 157, BRIGHT OPTICALLY-SELECTED QUASAR

FIELD CENTER:  $13^{\text{h}}21^{\text{m}}00.0^{\text{s}}$   $29^{\circ}25'44''$  (B1950)  
 $13^{\text{h}}23^{\text{m}}20.6^{\text{s}}$   $29^{\circ}10'06''$  (J2000)  
 $l: 50.97$   $b: 82.68$

DATE: 1979/347 - 1979/347  
 LIVETIME: 2715.9s  
 ROLL ANGLE:  $-119.2^{\circ}$

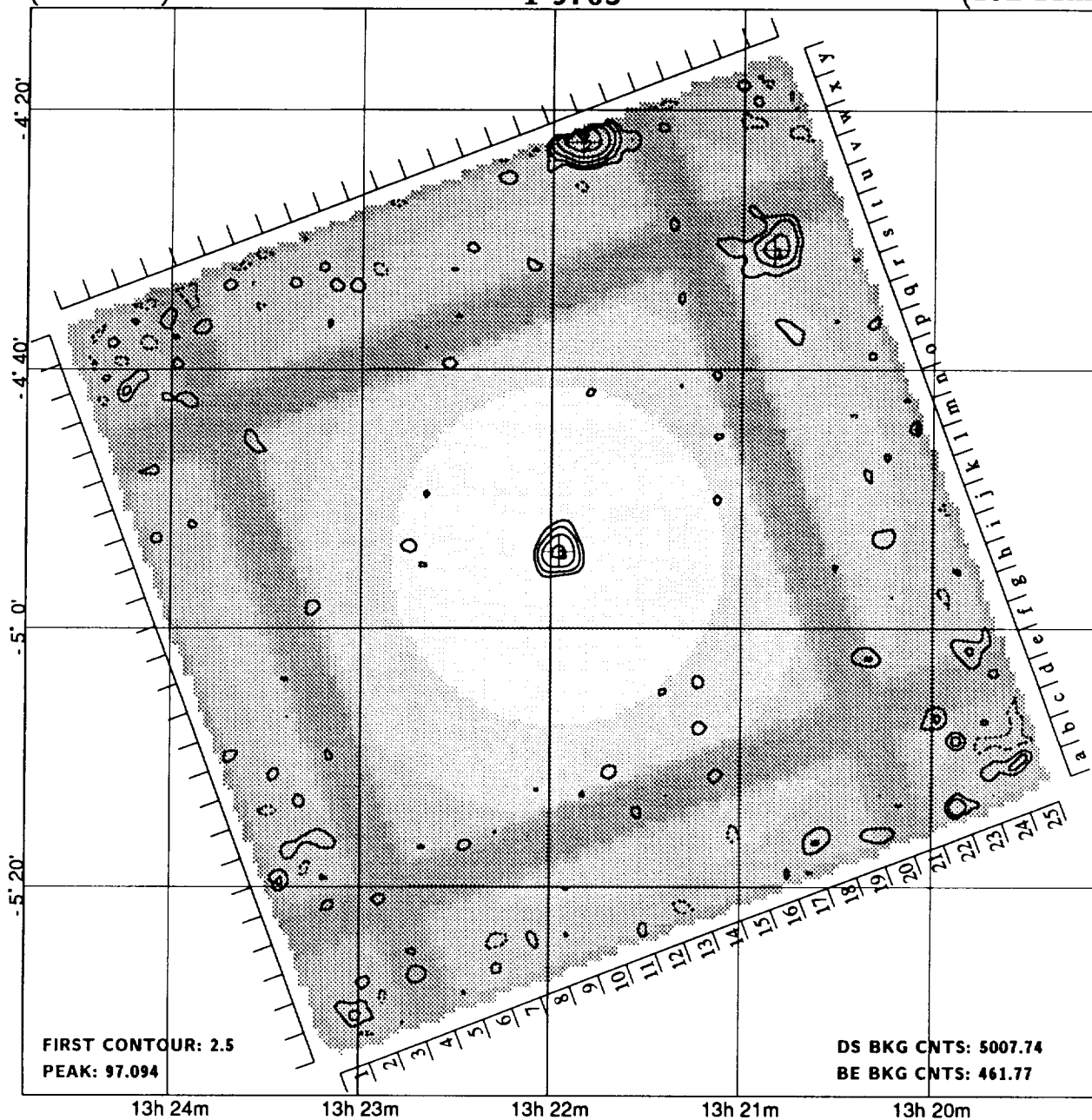
NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3037	1	13 22 19.6	29 25 46	51	0.0198	0.0041	29.9	8.1	4.9	0.8	0	17.5	H	

(13h 21m)

I 9703

(13h 21m)



F0-G5 STARS: HR 5050

FIELD CENTER:  $13^h 21^m 56.9^s$   $-04^\circ 54' 11''$  (B1950)  
 $13^h 24^m 32.7^s$   $-05^\circ 09' 48''$  (J2000)  
 $l: 318.08$   $b: 56.73$

DATE: 1981/ 32 - 1981/ 32  
 LIVETIME: 4057.9s  
 ROLL ANGLE:  $-110.7^\circ$

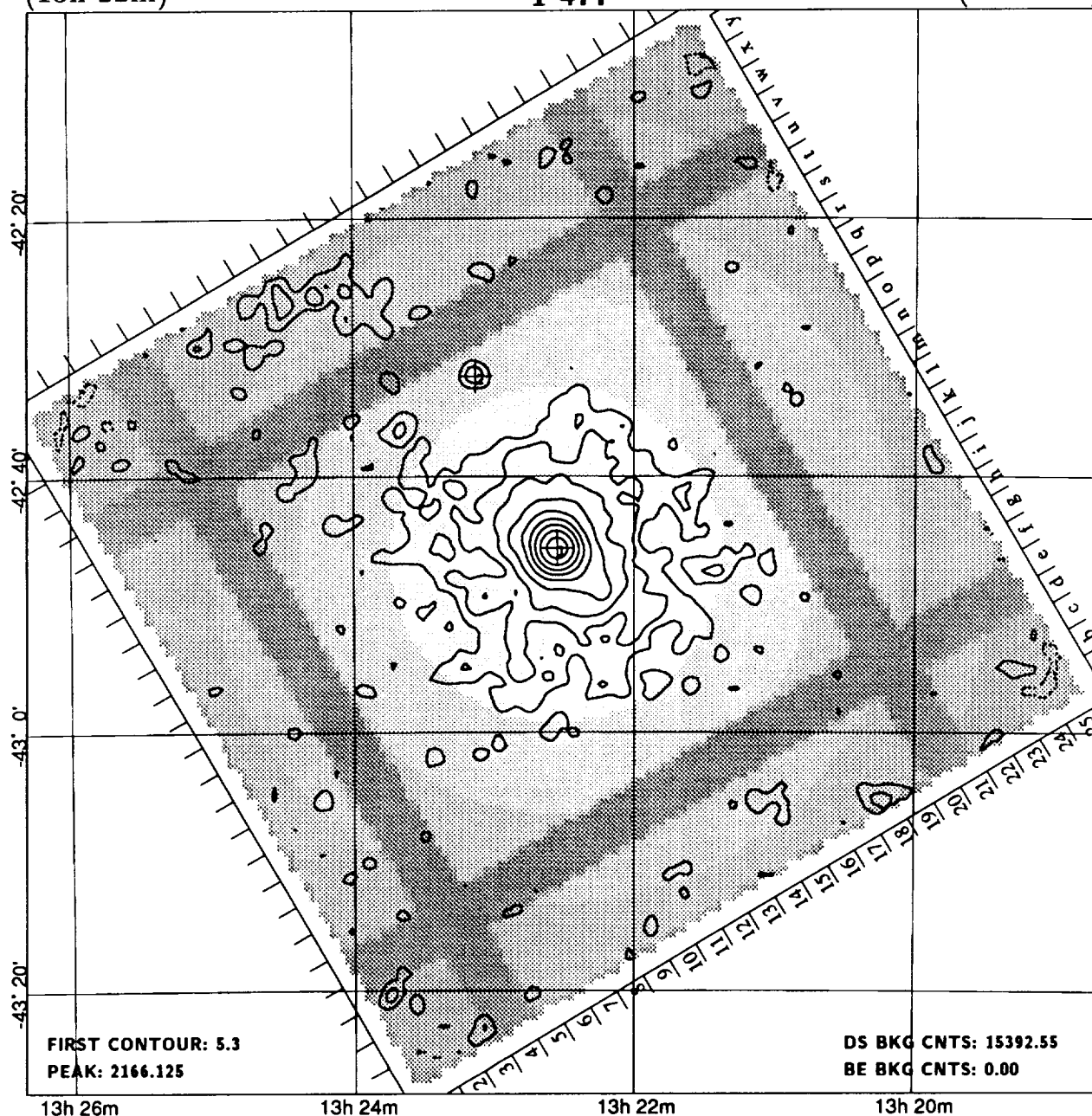
NH:  $2.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3030	1	13 20 50.1	-04 30 45	51	*0.0221	0.0043	32.6	7.4	5.2	1.6	601	28.5	H	
3033	2	13 21 50.6	-04 22 27	48	*0.118	0.011	128.3	8.7	11.0	1.3	704	31.9	EH	
3034	3	13 21 57.5	-04 54 05	31	0.0336	0.0035	101.8	13.2	9.5	1.1	0	0.4	H	S

(13h 22m)

I 477

(13h 22m)



## CEN-A INNER RADIO LOBES

FIELD CENTER:  $13^{\text{h}}22^{\text{m}}30.0^{\text{s}}$   $-42^{\circ}45'57''$  (B1950)  
 $13^{\text{h}}25^{\text{m}}26.0^{\text{s}}$   $-43^{\circ}01'33''$  (J2000)  
 $l: 309.51$   $b: 19.41$

DATE: 1979/ 35 - 1979/ 35  
 LIVETIME: 12473.0s  
 ROLL ANGLE:  $-120.4^{\circ}$

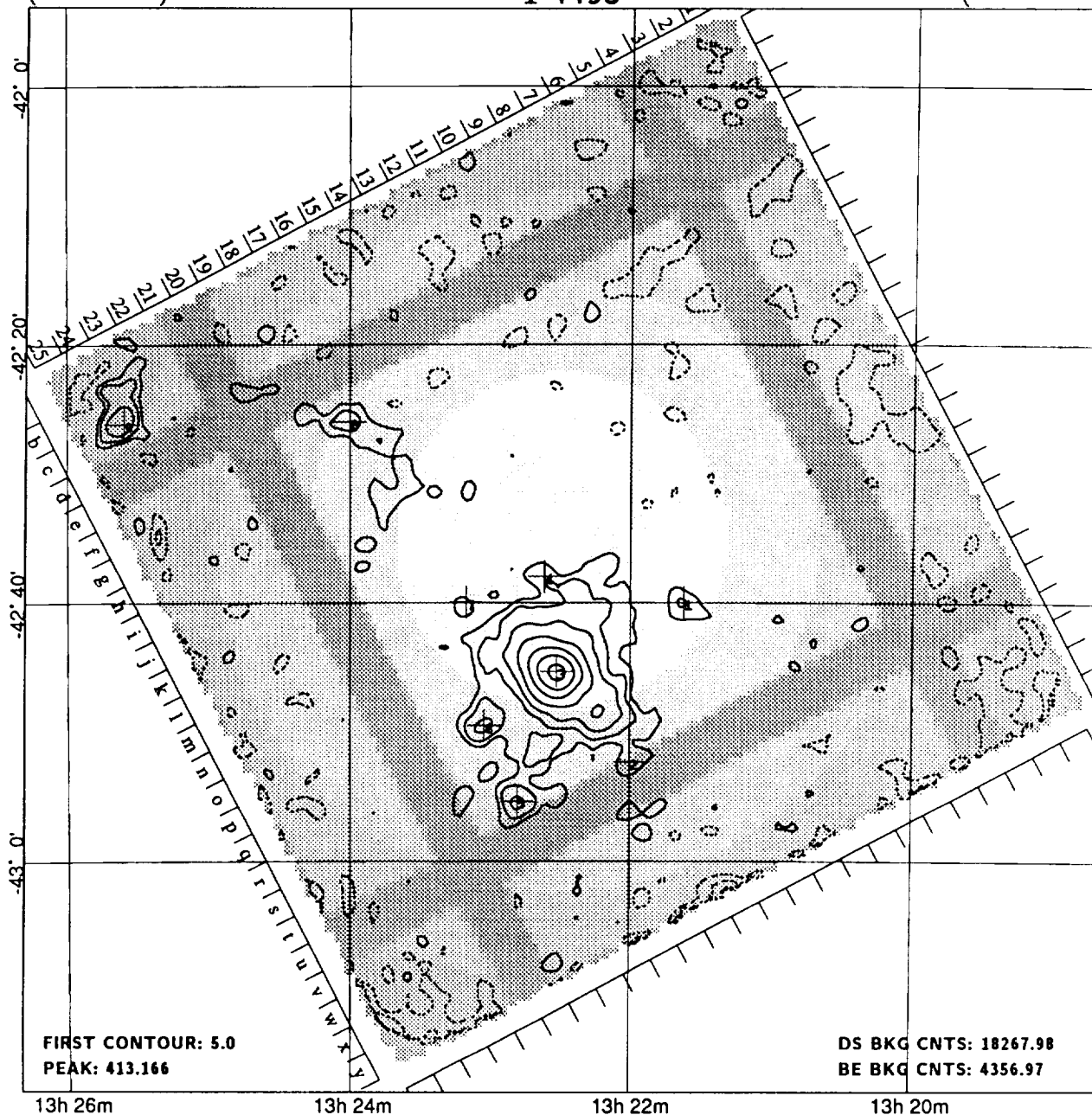
NH:  $8.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3038	1L	13 22 33.0	-42 45 35	31	0.836	0.011	7772.5	593.5	75.6	1.7	0	0.7	A	G
3045	2L	13 23 07.8	-42 32 15	55	0.0060	0.0014	44.1	28.9	4.1	0.6	200	15.4		

(13h 22m)

I 4493

(13h 22m)



## CEN A FOLLOW-UP

FIELD CENTER:  $13^{\text{h}}22^{\text{m}}30.0^{\text{s}}$   $-42^{\circ}35'59''$  (B1950)  
 $13^{\text{h}}25^{\text{m}}25.8^{\text{s}}$   $-42^{\circ}51'35''$  (J2000)  
 $l: 309.53$   $b: 19.58$

DATE: 1979/214 - 1979/215

NH:  $8.4\text{E}+20$ 

LIVETIME: 14803.1s

REF/ID: G

ROLL ANGLE:  $62.2^{\circ}$ 

FIELD FLAGS:

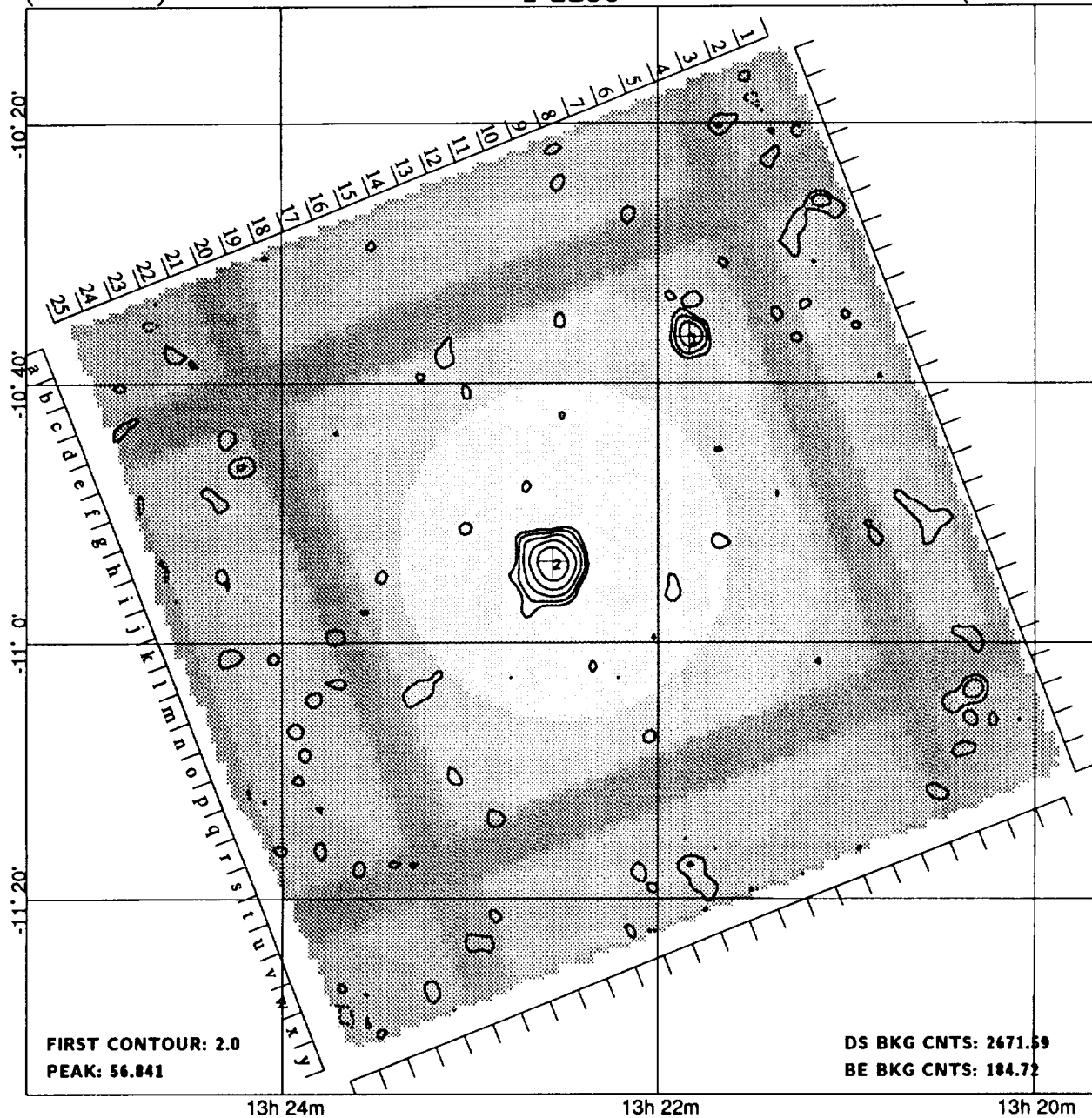
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3031	1	13 21 37.1	-42 39 58	45	0.00369	0.00097	35.9	53.1	3.8	0.9	0	10.5	H	
3035	2	13 22 00.2	-42 52 16	62	*0.0044	0.0010	35.3	35.7	4.2	102.2	906	17.0	H	
3038	3	13 22 31.4	-42 45 19	37	0.1552	0.0040	1526.1	51.9	38.4	2.5	0	9.2	AH	G
3040	4	13 22 36.7	-42 37 58	37	0.00432	0.00092	46.7	51.3	4.7	118.5	0	2.6	H	
3042	5	13 22 48.2	-42 55 19	50	*0.0084	0.0014	62.7	43.3	6.1	45.3	501	19.6	H	
3044	6	13 23 02.5	-42 49 29	50	0.0099	0.0013	85.5	48.5	7.4	44.2	0	15.1	H	
3047	7	13 23 10.4	-42 39 56	48	0.00326	0.00090	32.6	49.4	3.6	0.4	0	8.5	H	
3051	8	13 24 00.2	-42 25 58	51	0.0054	0.0012	42.0	43.0	4.6	1.7	100	19.6	H	
3056	9	13 25 36.0	-42 26 07	54	0.0141	0.0024	53.9	29.1	5.9	1.5	200	35.7	H	



(13h 22m)

I 2230

(13h 22m)



STELLAR SURVEY-EARLY TYPE STARS: HD116658=ALPHA VIR

FIELD CENTER:  $13^{\text{h}}22^{\text{m}}30.0^{\text{s}}$   $-10^{\circ}52'59''$  (B1950) $13^{\text{h}}25^{\text{m}}08.4^{\text{s}}$   $-11^{\circ}08'35''$  (J2000) $l: 316.10$   $b: 50.86$ 

DATE: 1979/182 - 1979/182

LIVETIME: 2164.9s

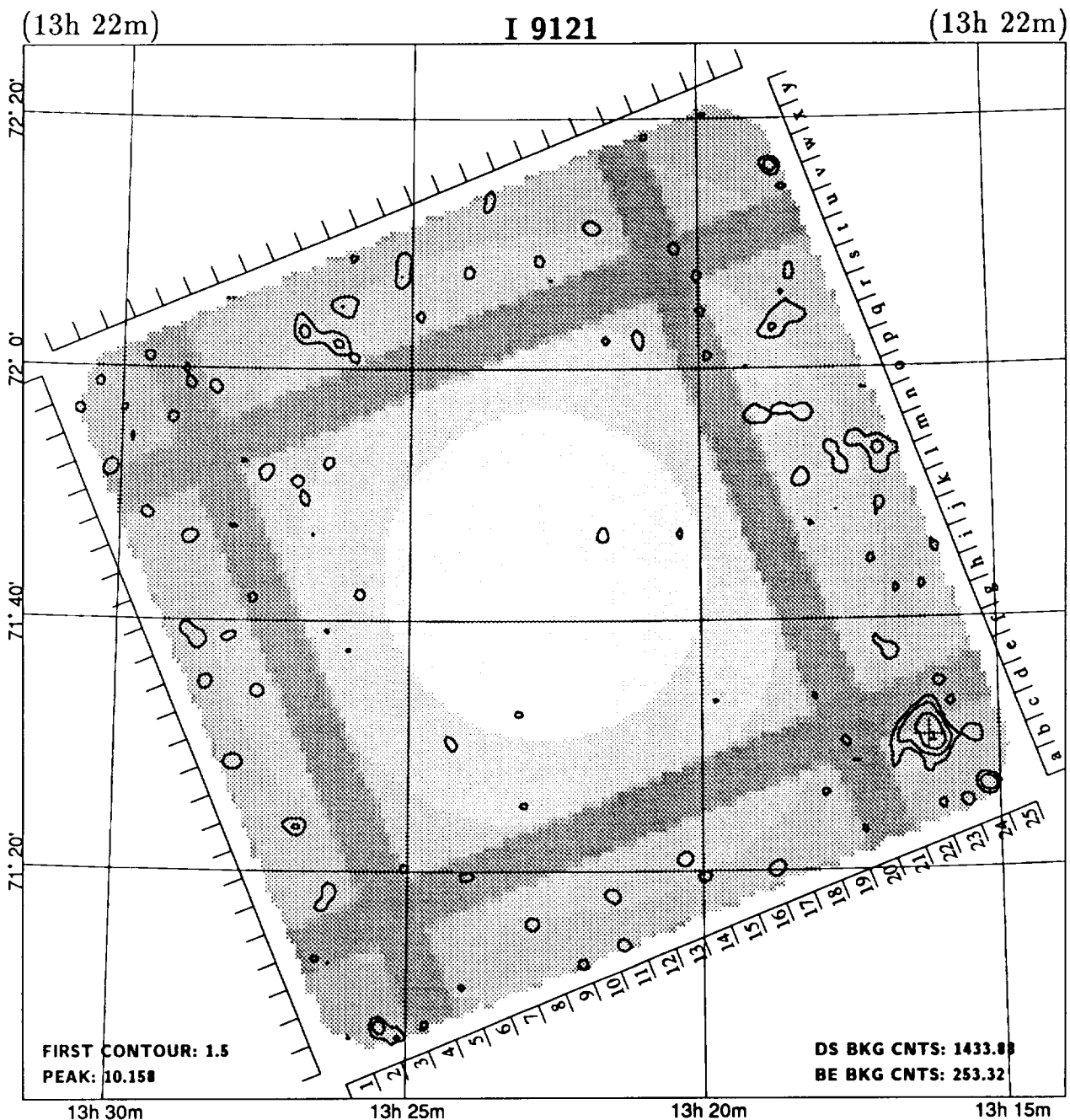
ROLL ANGLE:  $68.6^{\circ}$ NH:  $2.7\text{E}+20$ 

REF/ID:

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3032	1	13 21 49.9	-10 36 25	50	0.0336	0.0058	38.0	5.0	5.8	0.9	0	19.4	H	
3039	2	13 22 33.7	-10 53 48	31	0.158	0.010	254.5	7.5	15.7	1.5	0	1.5	AH	S





CLUSTER OF GALAXY SURVEY: A1741d,f

FIELD CENTER:  $13^h 22^m 42.0^s$   $71^\circ 43' 59''$  (B1950)  
 $13^h 24^m 04.2^s$   $71^\circ 28' 23''$  (J2000)  
 $l: 119.25$   $b: 45.42$

DATE: 1980/358 - 1980/358  
 LIVETIME: 1161.9s  
 ROLL ANGLE:  $-112.0^\circ$

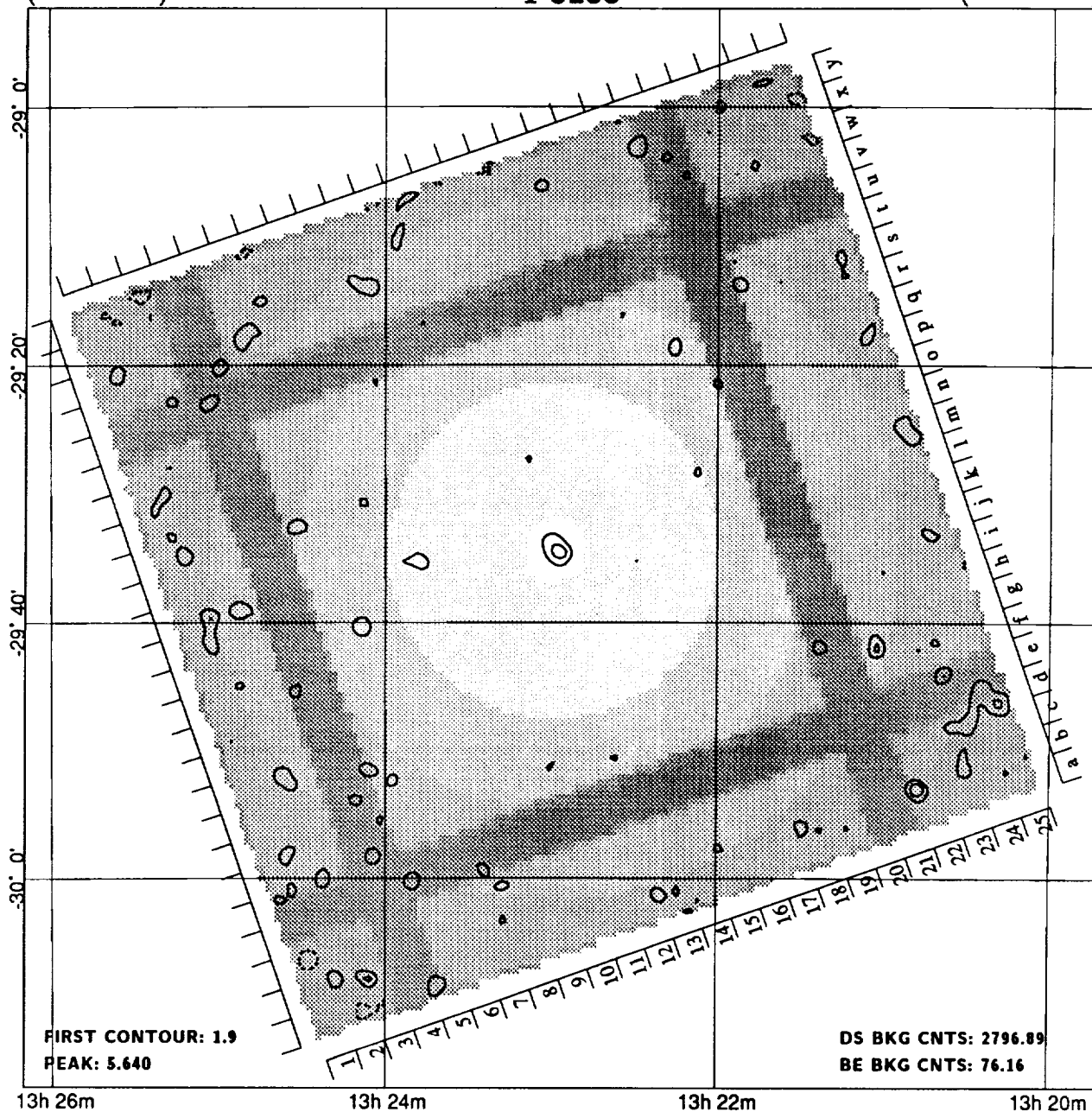
NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3015	1	13 16 10.8	71 30 39	54	*0.049	0.013	16.8	2.2	3.9	1.6	501	33.8	H

(13h 22m)

I 5255

(13h 22m)

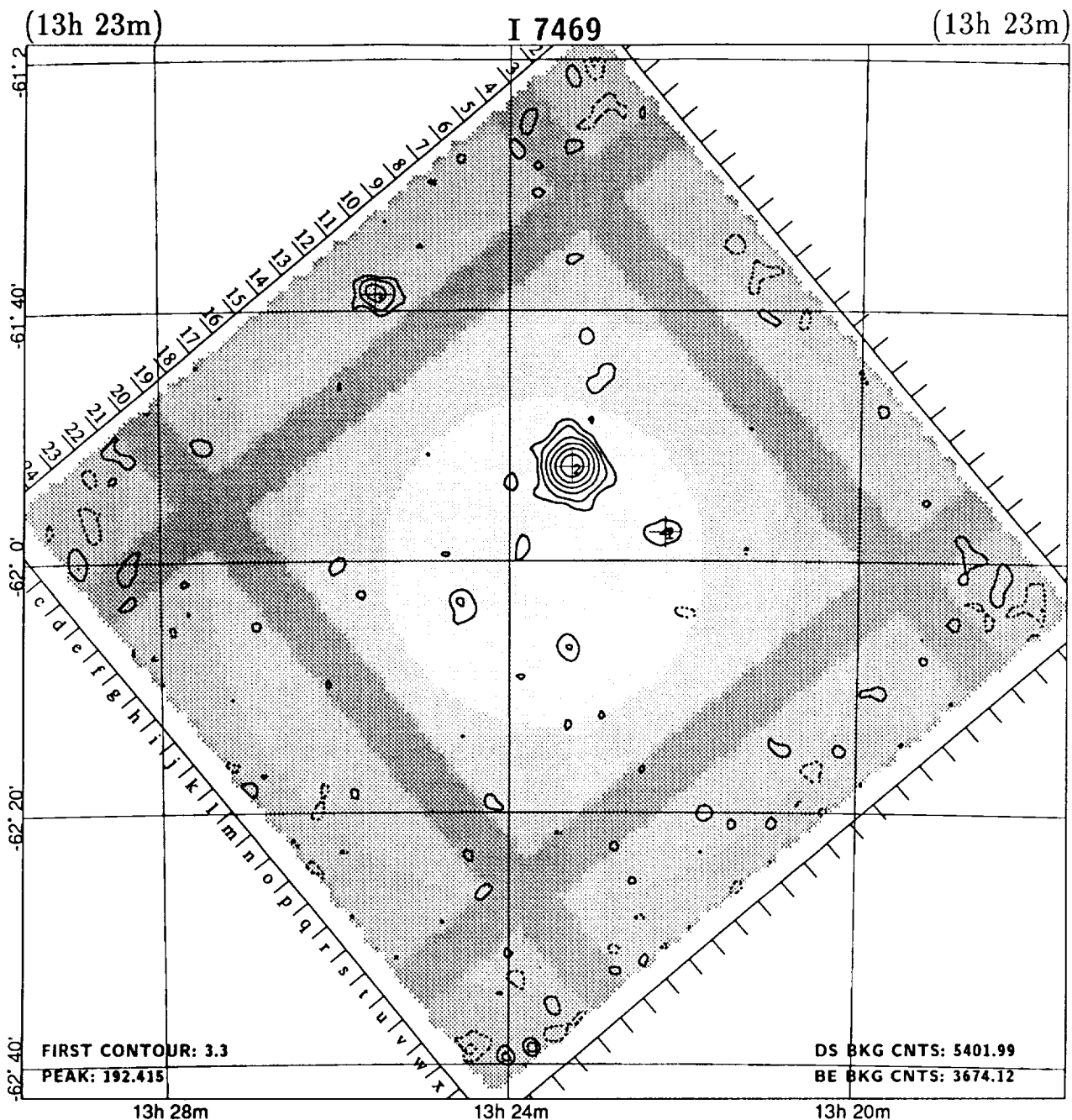


## NGC 5135, X-RAY AND OPTICAL STUDY OF NEARBY SEYFERT 2 GALAXIES

FIELD CENTER:  $13^{\text{h}}22^{\text{m}}56.0^{\text{s}}$   $-29^{\circ}34'17''$  (B1950)  
 $13^{\text{h}}25^{\text{m}}43.4^{\text{s}}$   $-29^{\circ}49'53''$  (J2000)  
 $l: 311.75$   $b: 32.45$

DATE: 1980/ 9 - 1980/ 9  
 LIVETIME: 2266.4s  
 ROLL ANGLE:  $-109.2^{\circ}$

NH:  $4.6\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:



4U1323-62, SOURCE IDENTIFICATION AND STRUCTURE

FIELD CENTER:  $13^h 23^m 36.0^s$   $-62^\circ 00' 53''$  (B1950)  
 $13^h 26^m 55.7^s$   $-62^\circ 16' 27''$  (J2000)  
 $l: 307.05$   $b: 0.31$

DATE: 1980/233 - 1980/233  
 LIVETIME: 4377.4s  
 ROLL ANGLE:  $50.1^\circ$

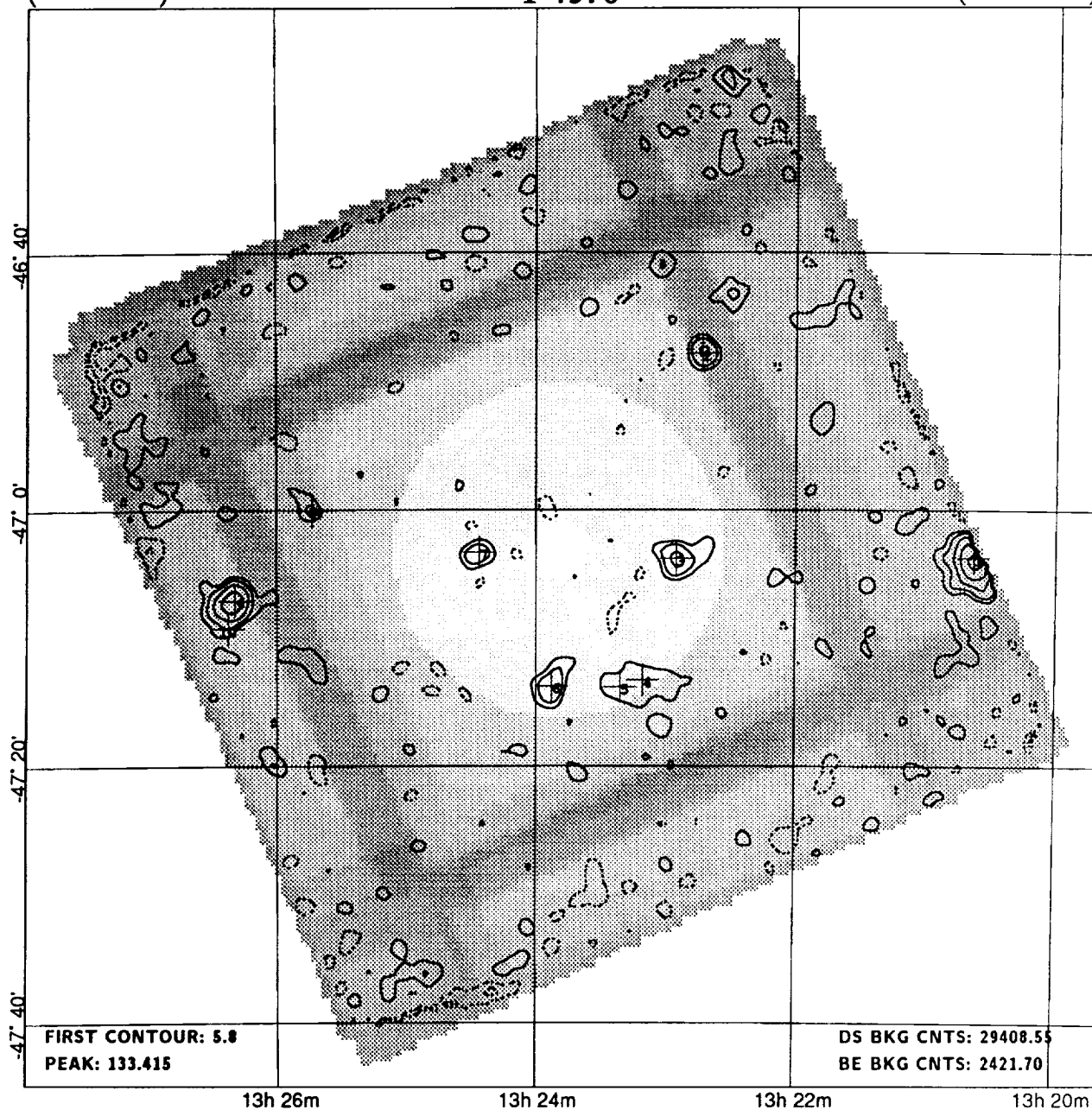
NH:  $1.7E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3036	1	13 22 12.9	-61 57 39	45	0.0094	0.0024	27.5	21.5	3.9	0.7	0	10.5		
3048	2	13 23 17.0	-61 52 25	37	0.2207	0.0087	664.3	22.7	25.3	1.2	0	9.0	H	
3055	3	13 25 31.9	-61 38 42	51	0.0211	0.0040	39.2	14.8	5.3	1.0	0	26.2	H	

(13h 23m)

I 4970

(13h 23m)



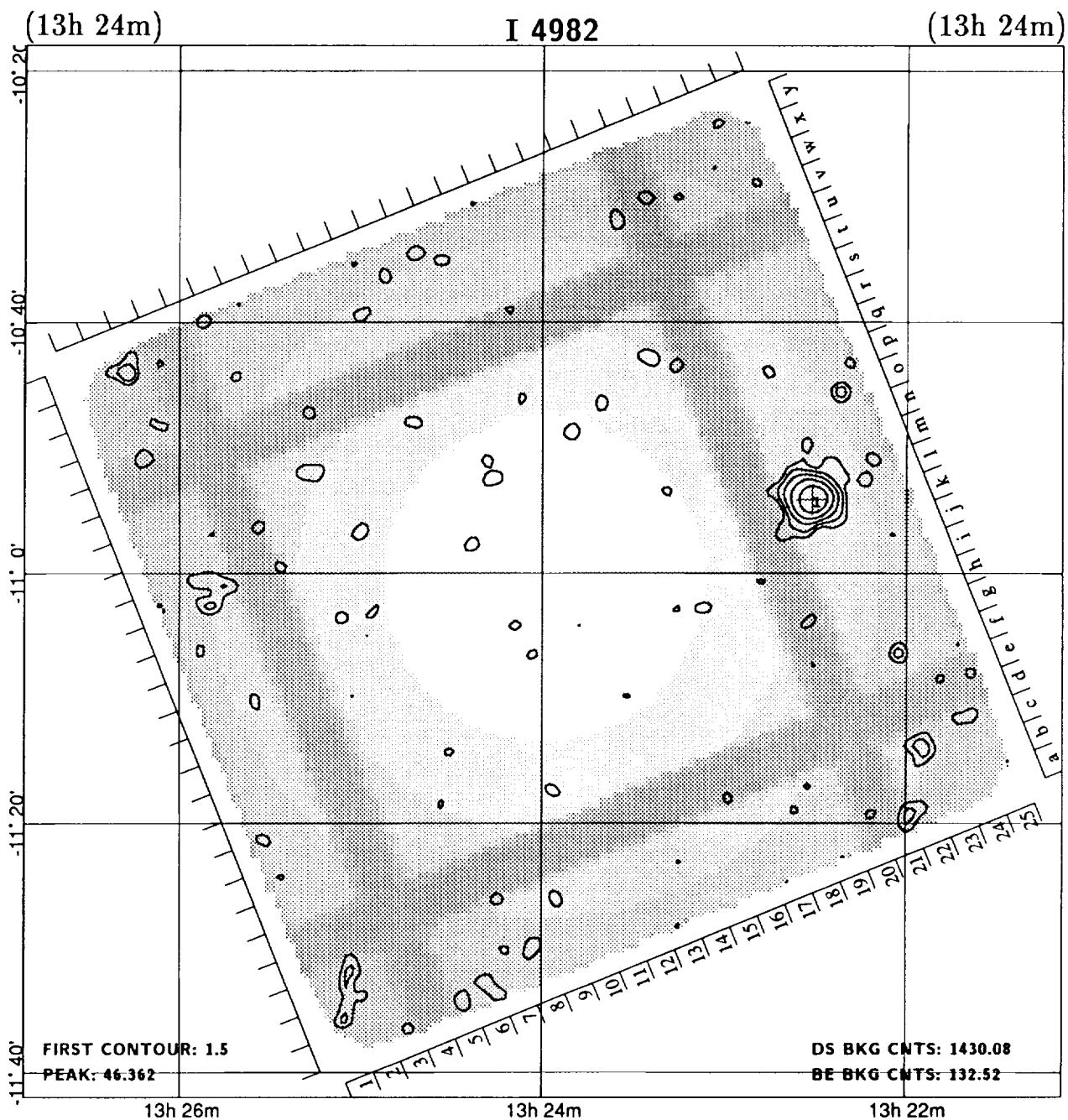
## NGC5139, SEARCH FOR GLOBULAR CLUSTER WINDS

FIELD CENTER:  $13^h 23^m 48.0^s$   $-47^\circ 02' 59''$  (B1950)  
 $13^h 26^m 48.0^s$   $-47^\circ 18' 33''$  (J2000)  
 $l: 309.13$   $b: 15.14$

DATE: 1980/ 25 - 1980/204  
 LIVETIME: 23830.6s

NH: 1.0E+21  
 REF/ID: GLB  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3029	1	13 20 37.9	-47 03 39	47	*0.0455	0.0031	245.5	39.5	14.5	1.4	704	32.4	EH	
3041	2	13 22 43.2	-46 47 51	50	*0.00567	0.00086	71.3	45.7	6.6	0.8	1108	18.9		
3043	3	13 22 55.0	-47 03 46	38	0.00641	0.00083	103.2	74.8	7.7	1.1	0	9.0	H	GLB
3046	4	13 23 10.3	-47 13 19	45	0.00286	0.00071	43.6	74.4	4.0	1.9	0	12.2	H	†
3049	5	13 23 20.8	-47 13 51	46	0.00279	0.00069	42.7	70.3	4.0	2.1	0	11.8		GLB
3050	6	13 23 52.8	-47 13 47	41	0.00542	0.00080	85.1	73.9	6.8	1.0	0	10.6	H	GLB
3052	7	13 24 26.3	-47 03 15	41	0.00403	0.00072	67.5	77.5	5.6	0.7	0	6.5		GLB
3057	8	13 25 43.5	-47 00 03	65	*0.00255	0.00072	31.4	47.6	3.5	0.8	906	19.8		
3061	9	13 26 19.1	-47 07 04	48	*0.0156	0.0014	155.5	49.5	10.9	1.2	501	26.1	H	GLB
3062	10	13 26 22.3	-47 09 14	56	0.00353	0.00095	34.0	49.0	3.7	4.6	0	27.0		†



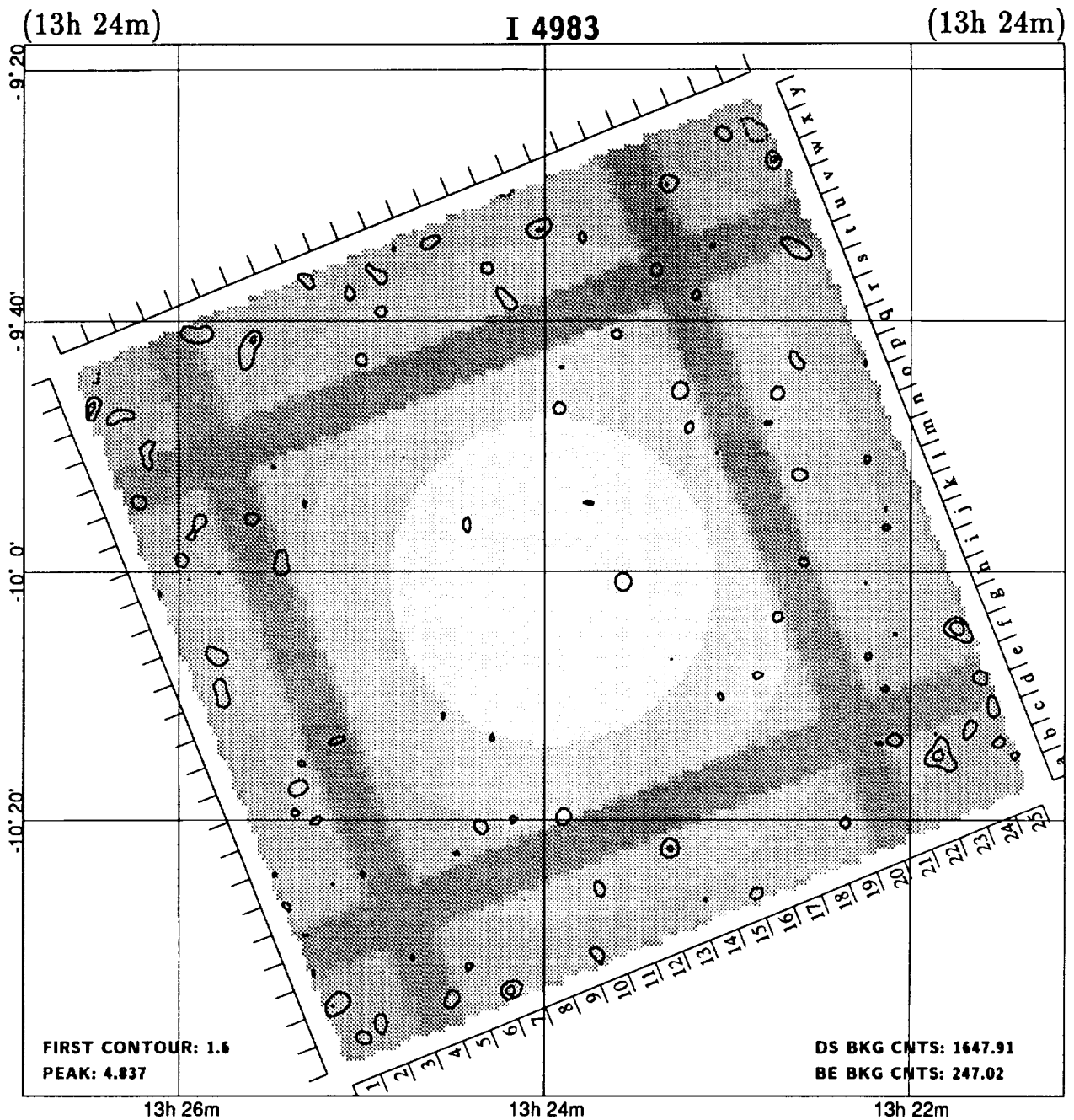
SOFT SOURCE NEAR ALPHA VIR #2

FIELD CENTER:  $13^{\text{h}}24^{\text{m}}00.0^{\text{s}}$   $-10^{\circ}59'59''$  (B1950)  
 $13^{\text{h}}26^{\text{m}}38.5^{\text{s}}$   $-11^{\circ}15'33''$  (J2000)  
 $l$ : 316.63  $b$ : 50.67

DATE: 1980/ 17 - 1980/ 17  
LIVETIME: 1158.8s  
ROLL ANGLE:  $-111.9^{\circ}$

NH:  $2.7\text{E}+20$   
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3039	1	13 22 30.9	-10 54 08	48	0.224	0.021	121.9	3.1	10.9	1.5	0	22.9	AH	S



**SOFT SOURCE NEAR ALPA VIR #3**

FIELD CENTER:  $13^h 24^m 00.0^s$   $-09^\circ 59' 59''$  (B1950)  
 $13^h 26^m 38.1^s$   $-10^\circ 15' 33''$  (J2000)  
 $l$ : 316.97  $b$ : 51.65

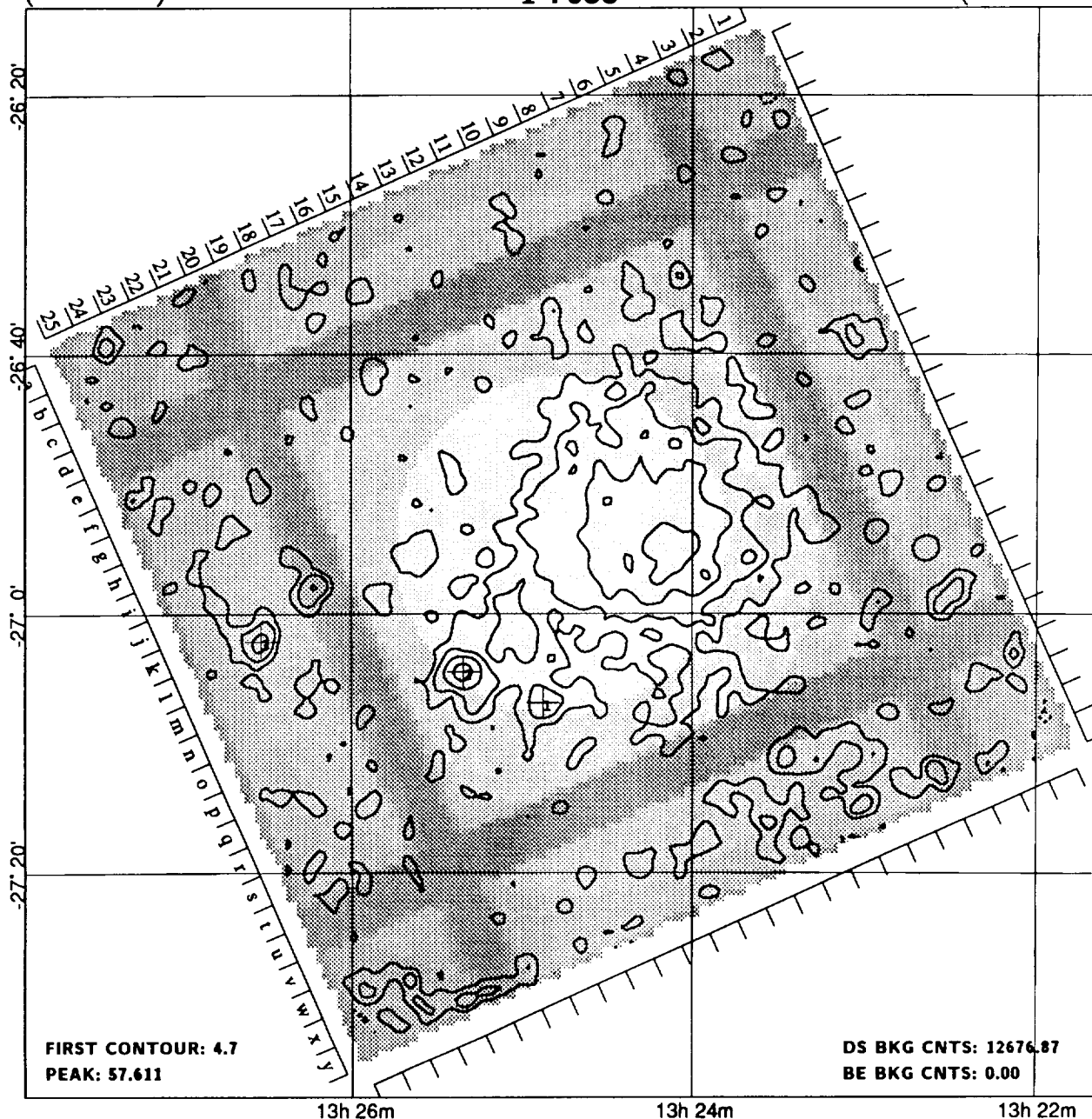
DATE: 1980/ 16 - 1980/ 17  
 LIVETIME: 1335.4s  
 ROLL ANGLE:  $-111.9^\circ$

NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 24m)

I 7653

(13h 24m)



## ABELL 1736, CLUSTERS OF GALAXIES W/UNUSUAL OPTICAL MORPHOLOGY

FIELD CENTER:  $13^{\text{h}}24^{\text{m}}46.0^{\text{s}}$   $-26^{\circ}55'24''$  (B1950) $13^{\text{h}}27^{\text{m}}32.3^{\text{s}}$   $-27^{\circ}10'57''$  (J2000) $l: 312.74$   $b: 35.00$ 

DATE: 1980/208 - 1980/209

LIVETIME: 10272.4s

ROLL ANGLE:  $66.0^{\circ}$ NH:  $5.0\text{E}+20$ 

REF/ID:

FIELD FLAGS: LS

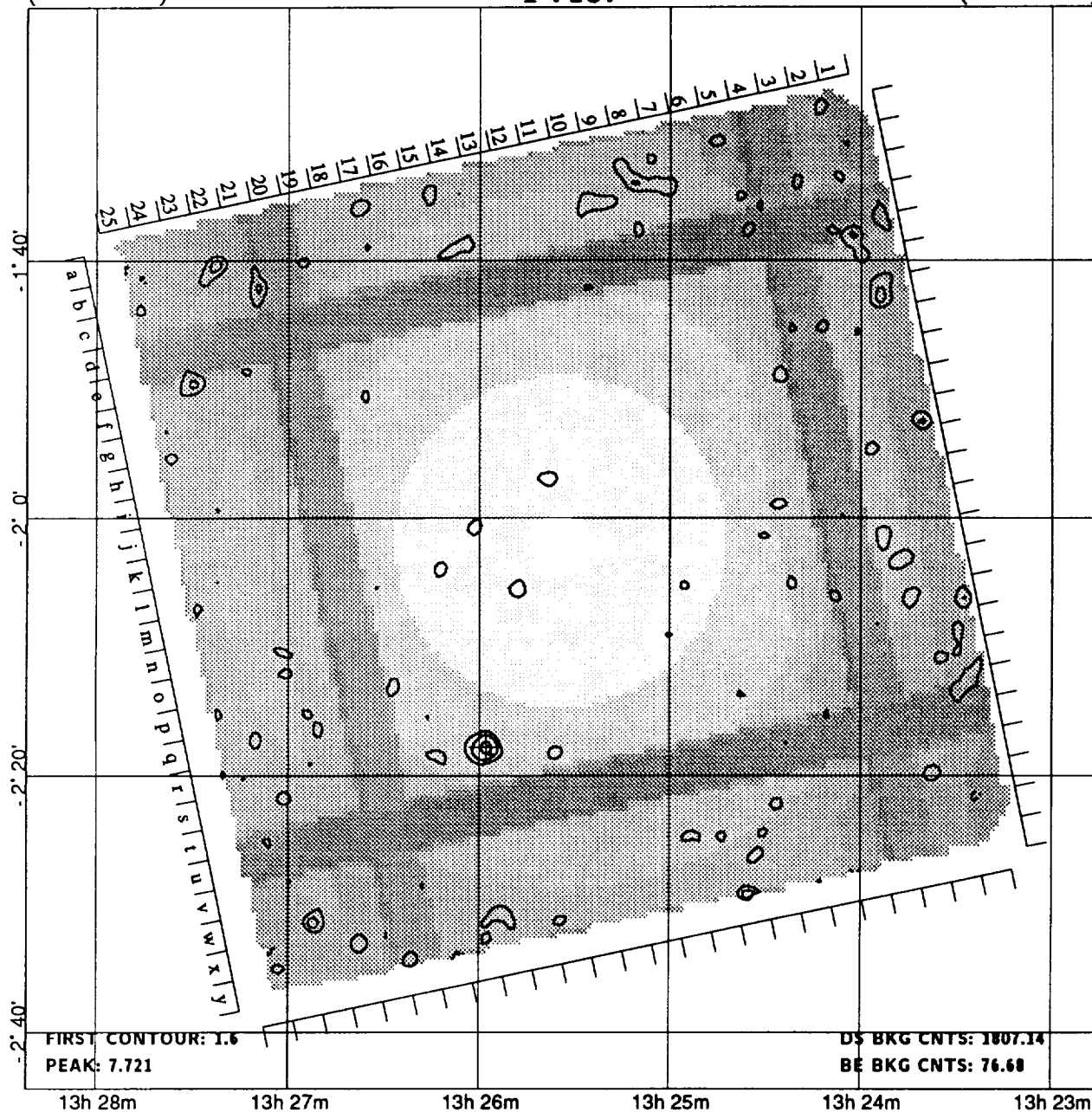
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3053	1L	13 24 52.6	-27 06 54	42	0.0069	0.0018	44.9	50.1	3.6	70.9	0	11.6	
3054	2L	13 25 20.7	-27 04 29	38	0.0212	0.0026	138.0	64.0	8.1	27.4	0	11.9	
3063	3L	13 26 31.9	-27 02 07	51	0.0124	0.0024	55.5	28.5	5.0	1.4	0	24.5	



(13h 25m)

I 7137

(13h 25m)



FIELD CENTER:  $13^{\text{h}}25^{\text{m}}33.6^{\text{s}}$   $-02^{\circ}02'23''$  (B1950)  
 $13^{\text{h}}28^{\text{m}}08.3^{\text{s}}$   $-02^{\circ}17'55''$  (J2000)  
 $l: 321.10$   $b: 59.27$

DATE: 1980/197 - 1980/197  
 LIVETIME: 1464.4s  
 ROLL ANGLE:  $78.2^{\circ}$

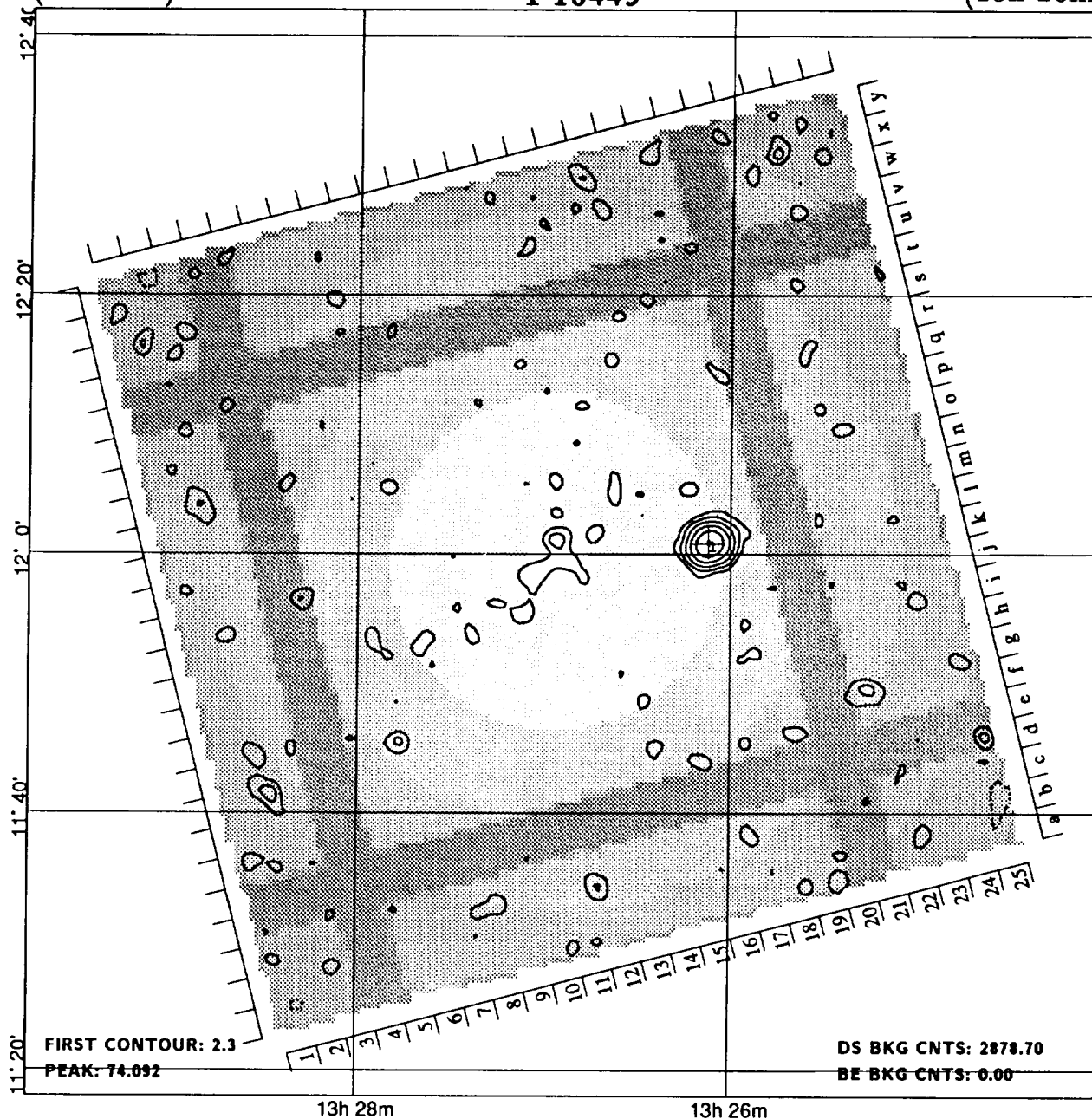
NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3058	1	13 25 57.8	-02 17 48	52	0.0226	0.0057	18.5	3.5	3.9	0.8	0	16.5	

(13h 26m)

I 10449

(13h 26m)



## MKW 11, CD IN POOR CLUSTERS

FIELD CENTER:  $13^{\text{h}}26^{\text{m}}54.0^{\text{s}}$   $11^{\circ}59'59''$  (B1950)  
 $13^{\text{h}}29^{\text{m}}22.5^{\text{s}}$   $11^{\circ}44'31''$  (J2000)  
 $l: 334.83$   $b: 72.22$

DATE: 1981/ 29 - 1981/ 29  
 LIVETIME: 2332.7s  
 ROLL ANGLE:  $-104.5^{\circ}$

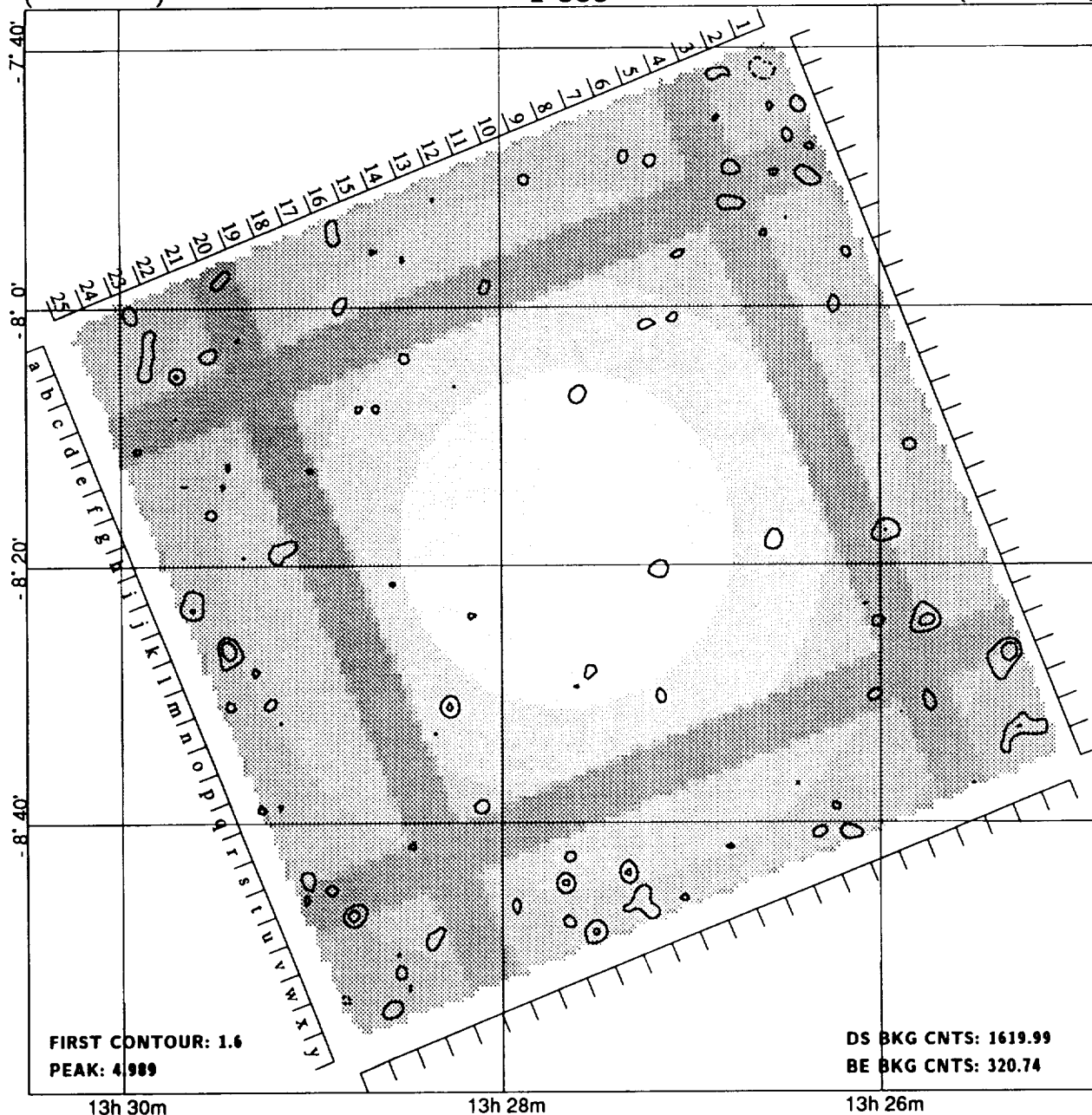
NH:  $1.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3059	1L	13 26 07.2	12 00 47	38	0.165	0.012	247.1	15.9	13.5	1.1	0	11.5		

(13h 27m)

I 885

(13h 27m)



## EG 099 (W485A) STELLAR OBSERVATIONS, WHITE DWARFS

FIELD CENTER:  $13^h 27^m 40.0^s$   $-08^\circ 18' 47''$  (B1950)  
 $13^h 30^m 17.5^s$   $-08^\circ 34' 15''$  (J2000)  
 $l$ : 319.06  $b$ : 53.08

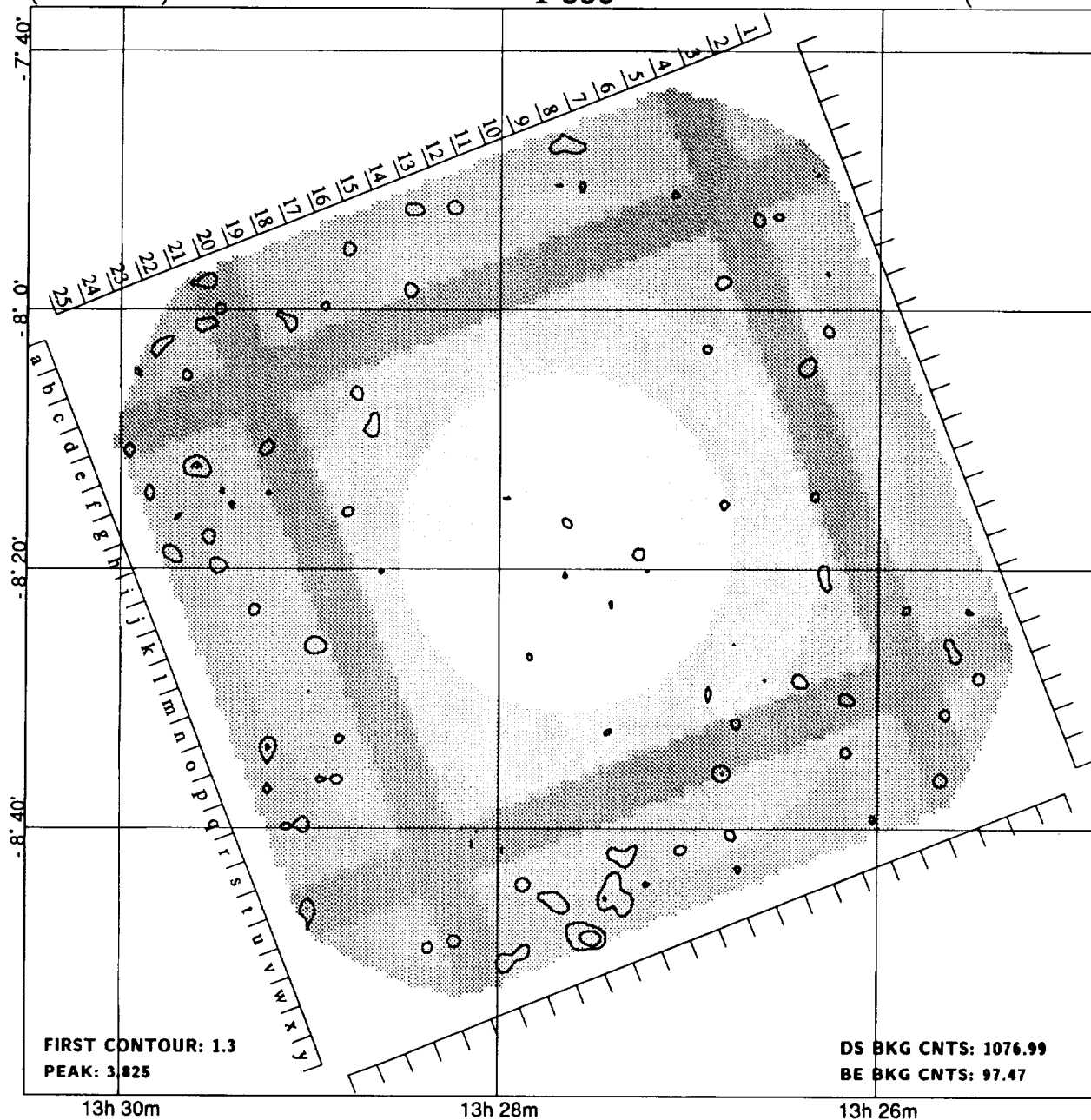
DATE: 1979/182 - 1979/182  
 LIVETIME: 1312.7s  
 ROLL ANGLE:  $68.1^\circ$

NH:  $2.5E+20$   
 REF/ID:  
 FIELD FLAGS: C

(13h 27m)

I 886

(13h 27m)

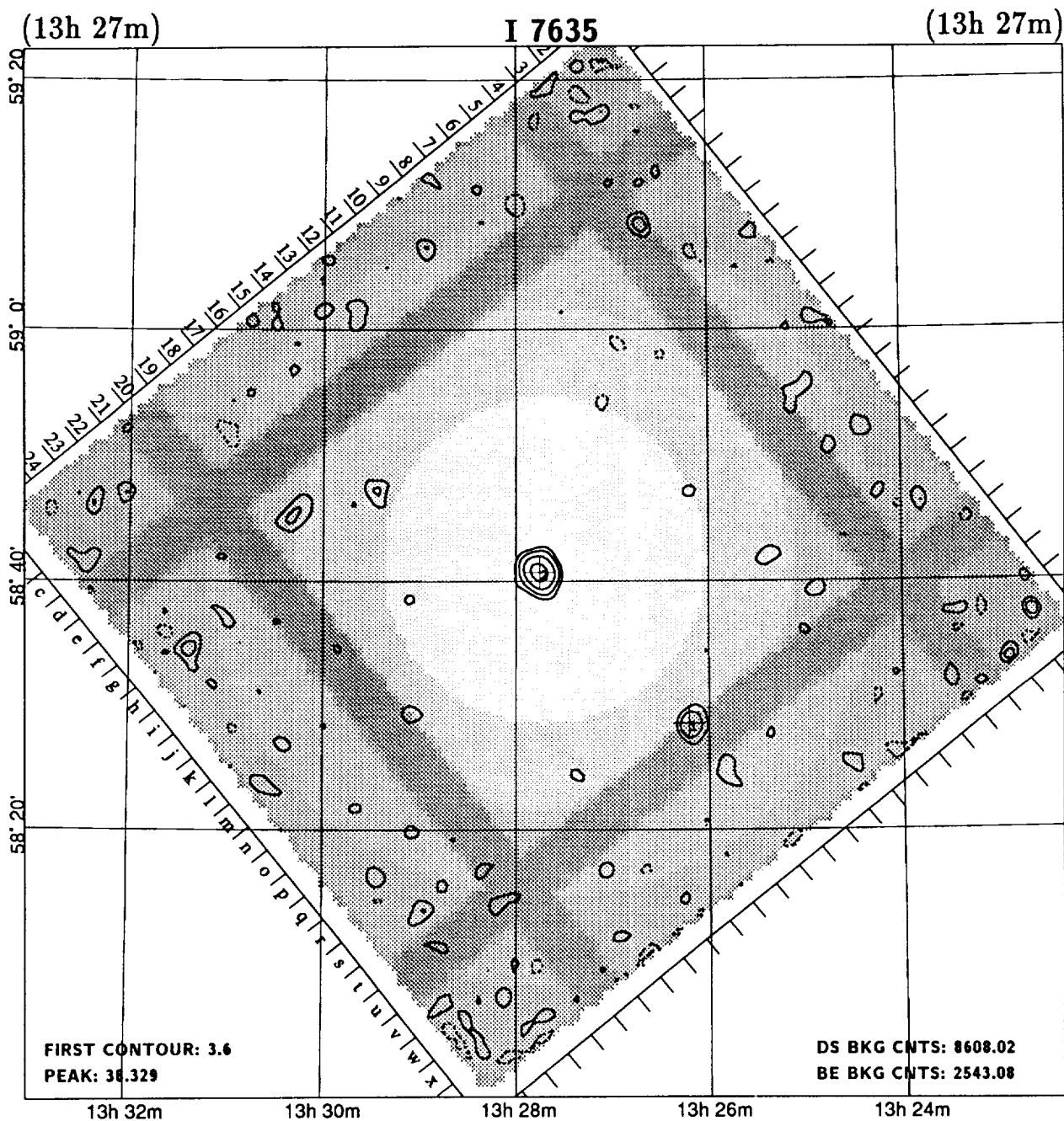


## EG 099 (W485A) STELLAR OBSERVATIONS, WHITE DWARFS

FIELD CENTER:  $13^{\text{h}}27^{\text{m}}40.0^{\text{s}}$   $-08^{\circ}18'47''$  (B1950)  
 $13^{\text{h}}30^{\text{m}}17.5^{\text{s}}$   $-08^{\circ}34'15''$  (J2000)  
 $l: 319.06$   $b: 53.08$

DATE: 1979/213 - 1979/213  
 LIVETIME: 872.7s  
 ROLL ANGLE:  $68.5^{\circ}$

NH:  $2.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C



NGC 5204, DWARF GAL OF M101 GROUP

FIELD CENTER:  $13^h 27^m 42.0^s$   $58^\circ 40' 41''$  (B1950)  
 $13^h 29^m 34.5^s$   $58^\circ 25' 13''$  (J2000)  
 $l: 113.51$   $b: 58.00$

DATE: 1980/159 - 1980/159  
 LIVETIME: 6975.4s  
 ROLL ANGLE:  $51.3^\circ$

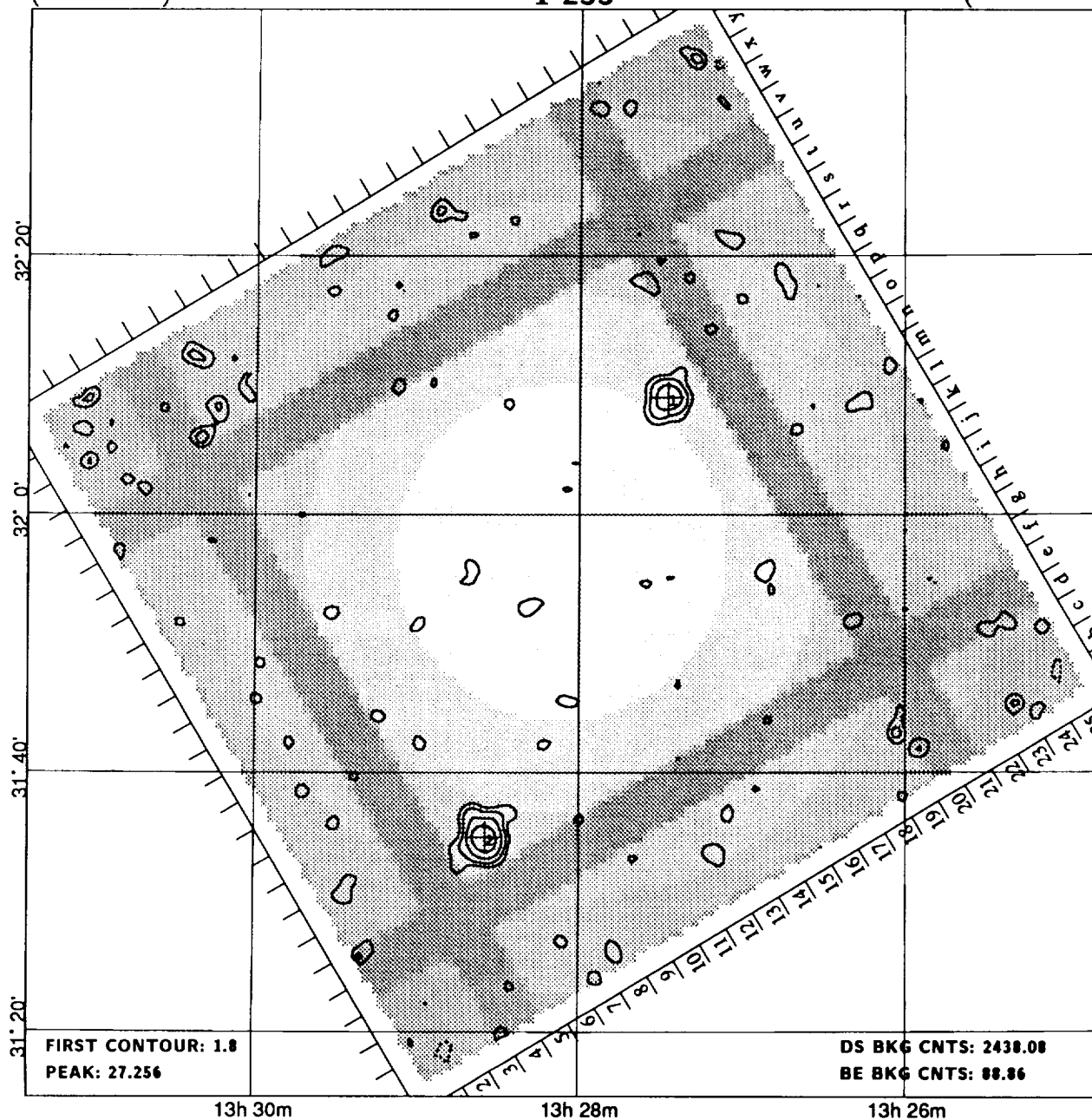
NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3060	1	13 26 12.4	58 28 29	51	*0.0090	0.0019	34.7	18.3	4.8	0.8	1006	17.0	H	
3067	2	13 27 45.1	58 40 42	31	0.0307	0.0027	159.5	30.5	11.6	1.0	0	0.4	H	G

(13h 28m)

I 235

(13h 28m)



C 1328.1+3157 CLUSTER EVOLUTION

FIELD CENTER:  $13^h 28^m 06.0^s$   $31^\circ 56' 59''$  (B1950)  
 $13^h 30^m 24.0^s$   $31^\circ 41' 32''$  (J2000)  
 $l: 63.54$   $b: 80.37$

DATE: 1978/357 - 1978/357  
 LIVETIME: 1975.7s  
 ROLL ANGLE:  $-120.8^\circ$

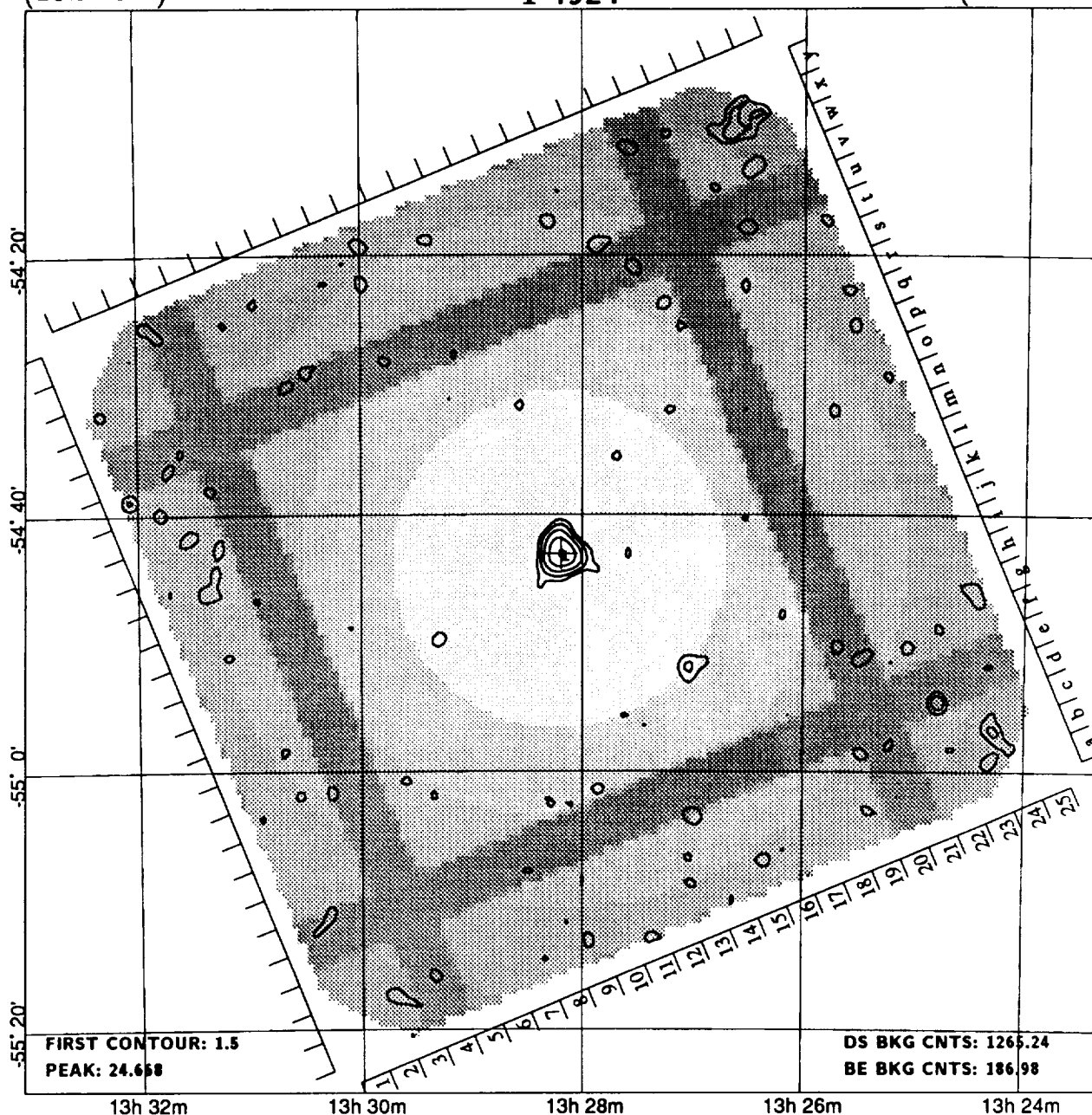
NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3065	1	13 27 27.3	32 09 01	41	0.0355	0.0058	42.1	4.9	6.1	1.1	0	14.6	H	AGN
3076	2	13 28 34.6	31 35 01	48	0.0702	0.0090	64.4	4.6	7.8	1.2	0	22.9	H	Q

(13h 28m)

I 4924

(13h 28m)



## CATAclysmic VARIABLE STARS: BV CEN

FIELD CENTER:  $13^{\text{h}}28^{\text{m}}10.0^{\text{s}}$   $-54^{\circ}42'59''$  (B1950)  
 $13^{\text{h}}31^{\text{m}}19.9^{\text{s}}$   $-54^{\circ}58'26''$  (J2000)  
 $l: 308.69$   $b: 7.45$

DATE: 1980/ 24 - 1980/ 24  
 LIVETIME: 1025.3s  
 ROLL ANGLE:  $-112.4^{\circ}$

NH:  $1.8\text{E}+21$   
 REF/ID: CV  
 FIELD FLAGS:

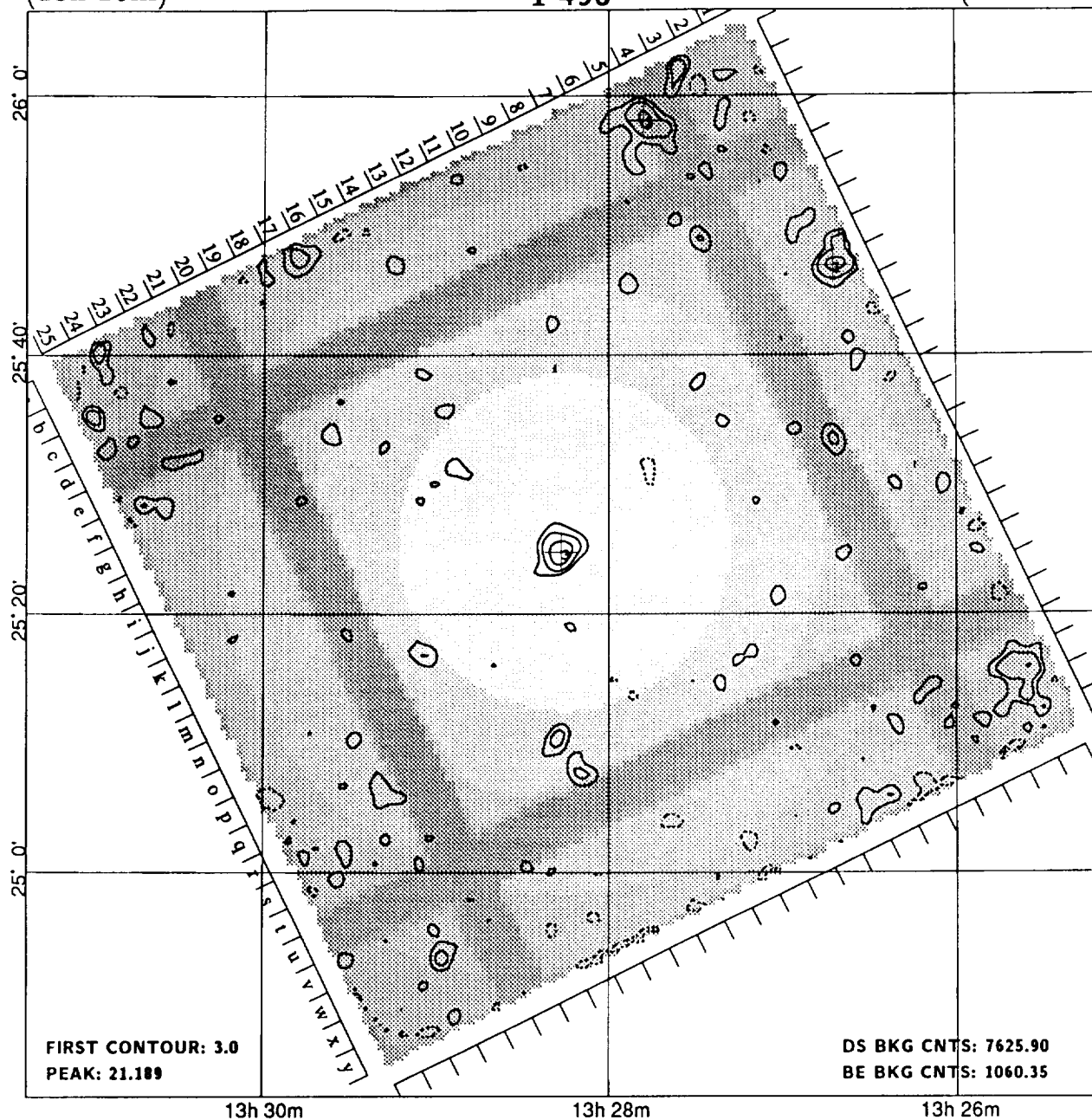
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3071	1	13 28 11.5	-54 42 58	31	0.122	0.013	93.4	3.6	9.5	1.1	0	0.2	H	CV



(13h 28m)

I 498

(13h 28m)



## 3CR 287 (QSO 1328+254) QUASAR SURVEY

FIELD CENTER:  $13^{\text{h}}28^{\text{m}}16.1^{\text{s}}$   $25^{\circ}24'36''$  (B1950)  
 $13^{\text{h}}30^{\text{m}}37.8^{\text{s}}$   $25^{\circ}09'10''$  (J2000)  
 $l: 22.47$   $b: 80.99$

DATE: 1980/182 - 1980/183  
 LIVETIME: 6179.5s  
 ROLL ANGLE:  $64.0^{\circ}$

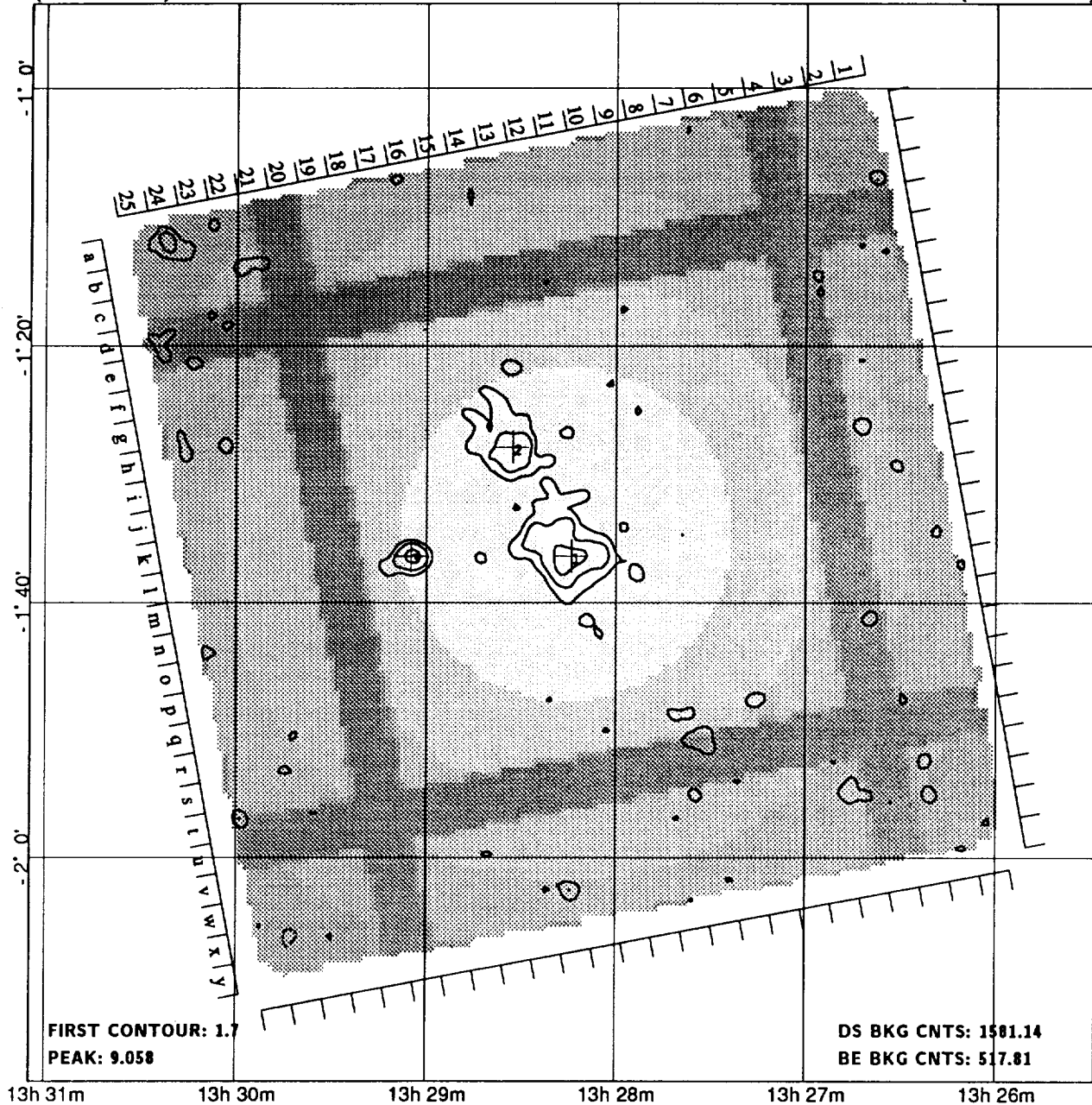
NH:  $1.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3064	1	13 26 42.2	25 46 51	53	0.0115	0.0029	24.8	13.2	4.0	1.1	300	30.7	H	
3068	2	13 27 47.9	25 58 05	55	*0.0134	0.0032	24.5	10.5	4.1	1.5	907	34.0		
3073	3	13 28 16.5	25 24 44	32	0.0167	0.0022	76.7	22.3	7.7	1.1	0	0.2	H	Q

(13h 28m)

I 144

(13h 28m)



## A1750 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $13^{\text{h}}28^{\text{m}}16.8^{\text{s}}$   $-01^{\circ}35'23''$  (B1950)  
 $13^{\text{h}}30^{\text{m}}51.3^{\text{s}}$   $-01^{\circ}50'50''$  (J2000)  
 $l: 322.63$   $b: 59.51$

DATE: 1979/206 - 1979/206  
 LIVETIME: 1281.3s  
 ROLL ANGLE:  $79.4^{\circ}$

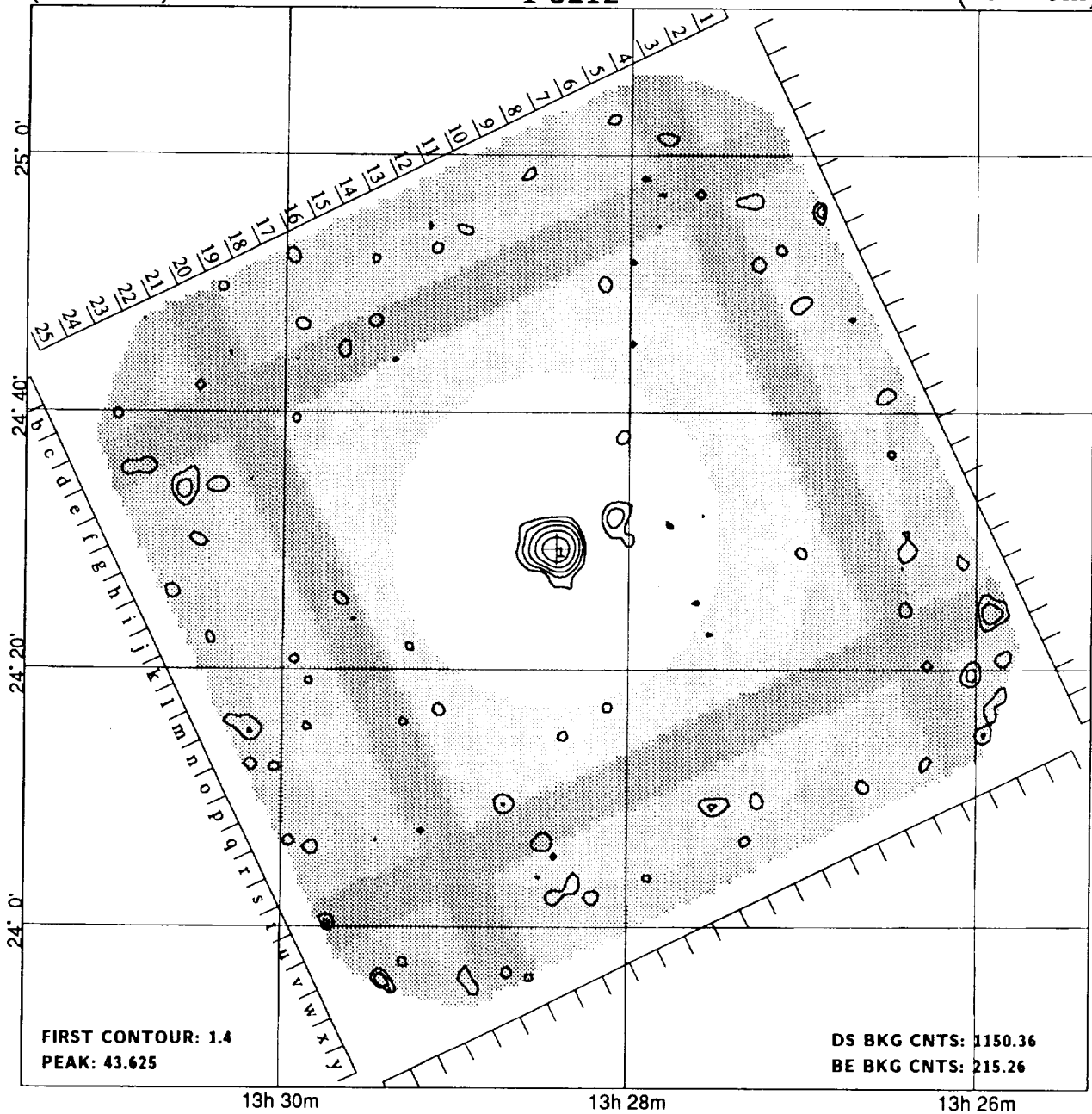
NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3072	1	13 28 14.0	-01 36 24	35	0.0506	0.0077	47.9	5.1	6.6	3.6	0	0.4	H	
3075	2	13 28 32.7	-01 27 57	42	0.0271	0.0061	23.8	5.2	4.4	2.3	0	8.5	H	CLG
3078	3	13 29 04.9	-01 36 25	42	0.0328	0.0069	26.6	4.4	4.8	0.9	0	12.2	H	

(13h 28m)

I 3212

(13h 28m)



RS CVN SYSTEMS: FK COM

FIELD CENTER:  $13^{\text{h}}28^{\text{m}}24.7^{\text{s}}$   $24^{\circ}29'24''$  (B1950)  
 $13^{\text{h}}30^{\text{m}}46.9^{\text{s}}$   $24^{\circ}13'58''$  (J2000)  
 $l: 17.02$   $b: 80.68$

DATE: 1979/183 - 1979/183  
 LIVETIME: 932.2s  
 ROLL ANGLE:  $64.2^{\circ}$

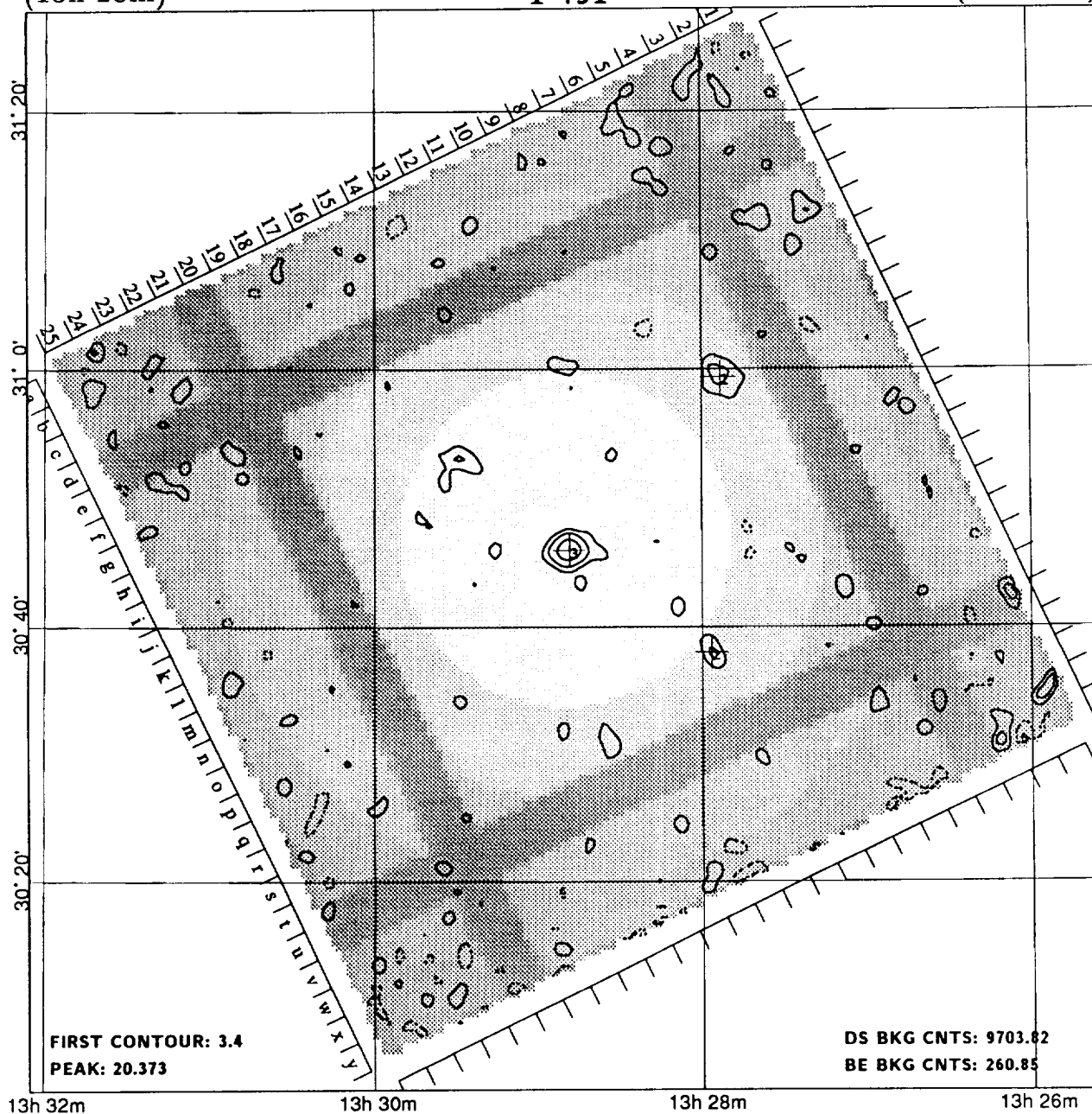
NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3074	1	13 28 25.1	24 29 27	31	0.253	0.019	175.6	3.4	13.1	1.2	0	0.2	H	S

(13h 28m)

I 491

(13h 28m)



## 3CR 286 (QSO 1328+307) QUASAR SURVEY

FIELD CENTER:  $13^{\text{h}}28^{\text{m}}50.7^{\text{s}}$   $30^{\circ}45'58''$  (B1950)  
 $13^{\text{h}}31^{\text{m}}09.3^{\text{s}}$   $30^{\circ}30'33''$  (J2000)  
 $l: 56.52$   $b: 80.67$

DATE: 1980/183 - 1980/183  
 LIVETIME: 7863.3s  
 ROLL ANGLE:  $64.3^{\circ}$

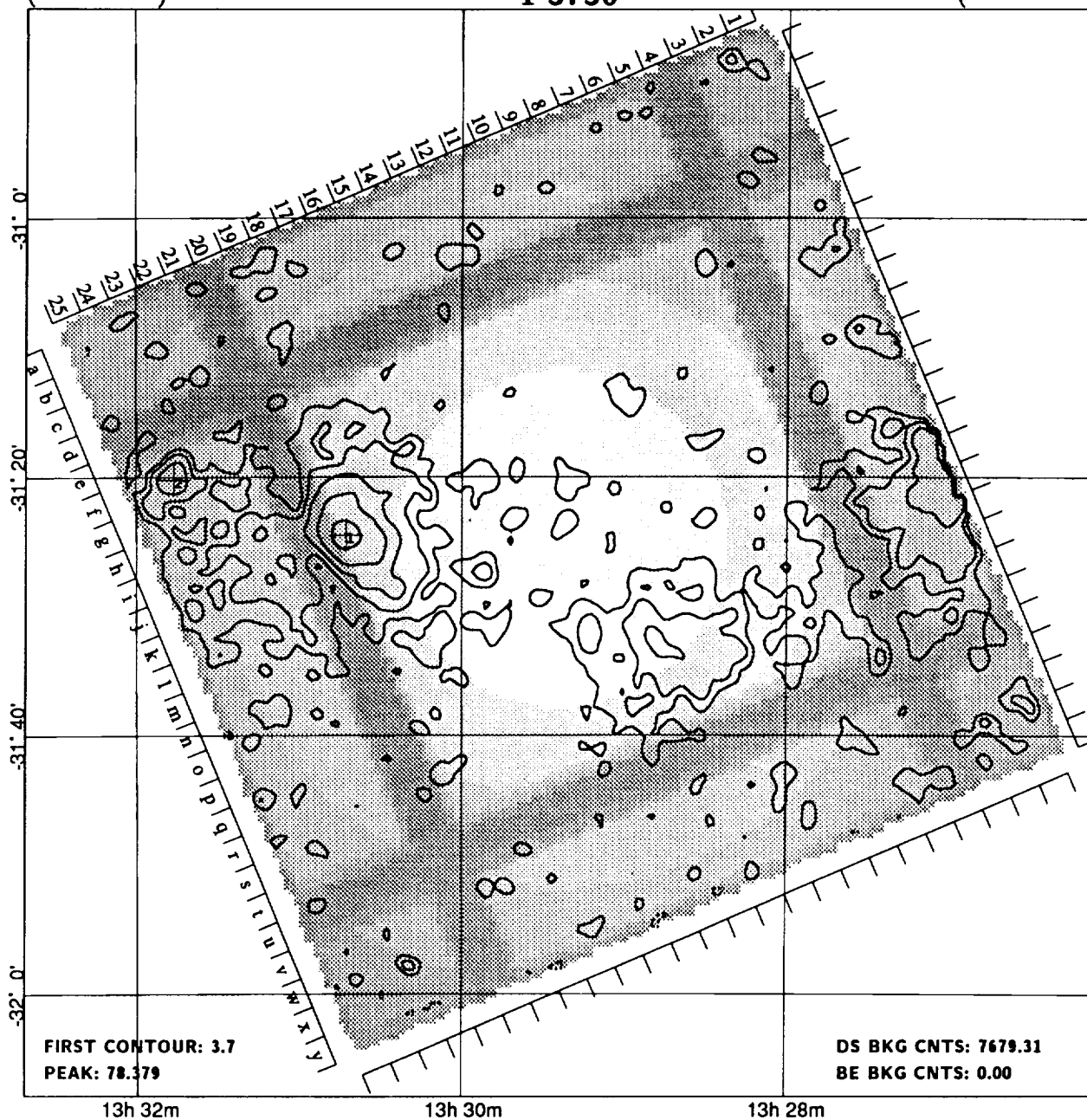
NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3069	1	13 27 53.1	30 59 23	56	0.0061	0.0015	26.2	17.8	4.0	1.2	0	17.4	H	
3070	2	13 27 56.6	30 37 57	45	0.0050	0.0014	23.5	21.5	3.5	0.6	0	14.0		
3077	3	13 28 48.5	30 45 54	32	0.0139	0.0018	81.4	24.6	7.9	1.0	0	0.4	H	Q

(13h 29m)

I 5730

(13h 29m)



CLUSTERS WITH IPC: SC1329-314

FIELD CENTER:  $13^h 29^m 24.0^s$   $-31^\circ 25' 59''$  (B1950)  
 $13^h 32^m 13.6^s$   $-31^\circ 41' 24''$  (J2000)  
 $l: 312.99$   $b: 30.38$

DATE: 1980/206 - 1980/206  
 LIVETIME: 6222.7s  
 ROLL ANGLE:  $67.1^\circ$

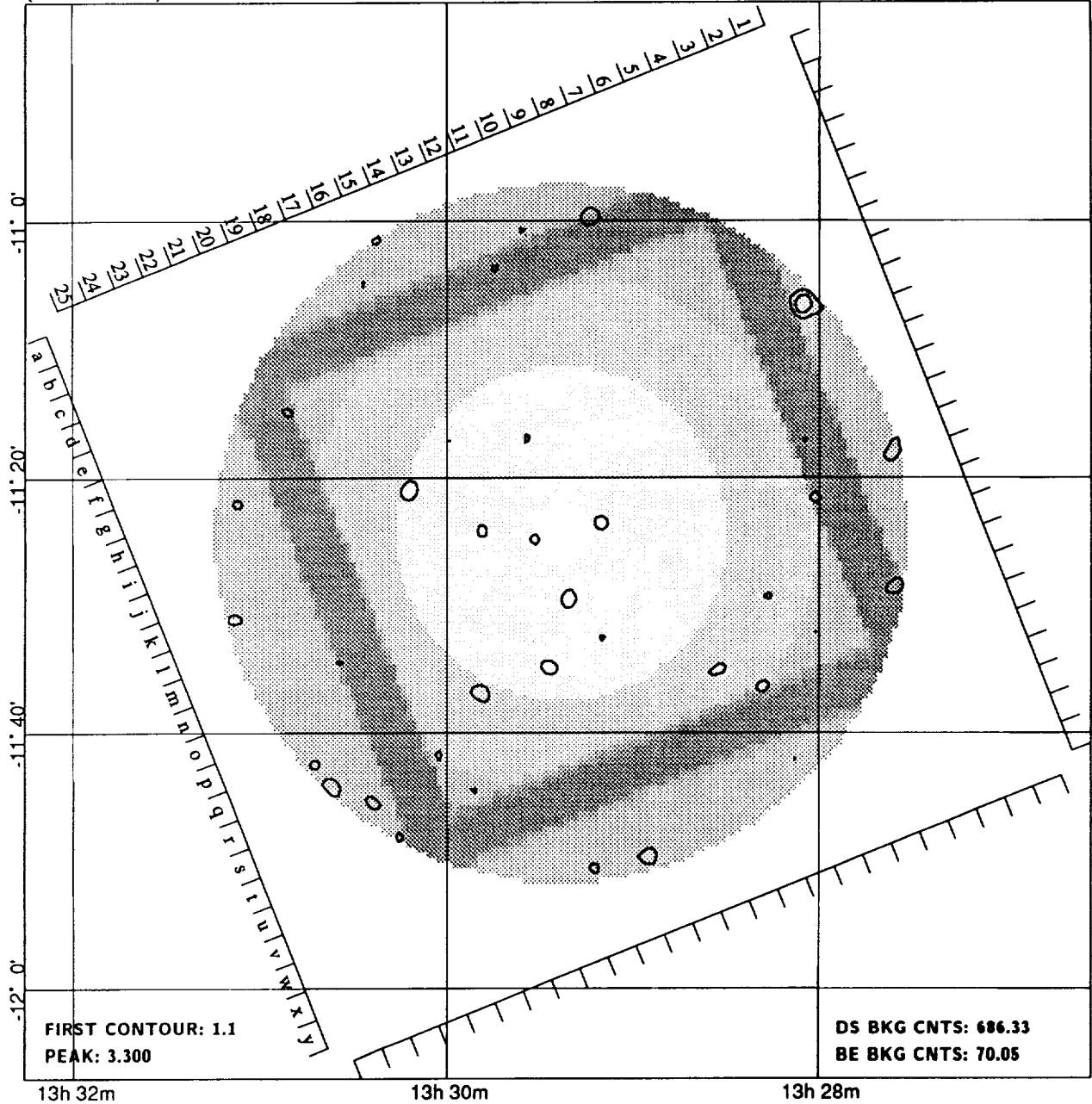
NH:  $4.2E+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3083	1L	13 30 42.9	-31 24 30	47	*0.0450	0.0088	156.7	185.3	5.0	7.0	704	16.9		
3088	2L	13 31 46.1	-31 20 12	51	0.0263	0.0049	54.9	21.1	5.2	23.6	0	30.7		

(13h 29m)

I 9122

(13h 29m)



## CLUSTER OF GALAXY SURVEY: A1754d

FIELD CENTER:  $13^{\text{h}}29^{\text{m}}24.0^{\text{s}}$   $-11^{\circ}24'59''$  (B1950)  
 $13^{\text{h}}32^{\text{m}}03.0^{\text{s}}$   $-11^{\circ}40'24''$  (J2000)  
 $l$ : 318.50  $b$ : 49.97

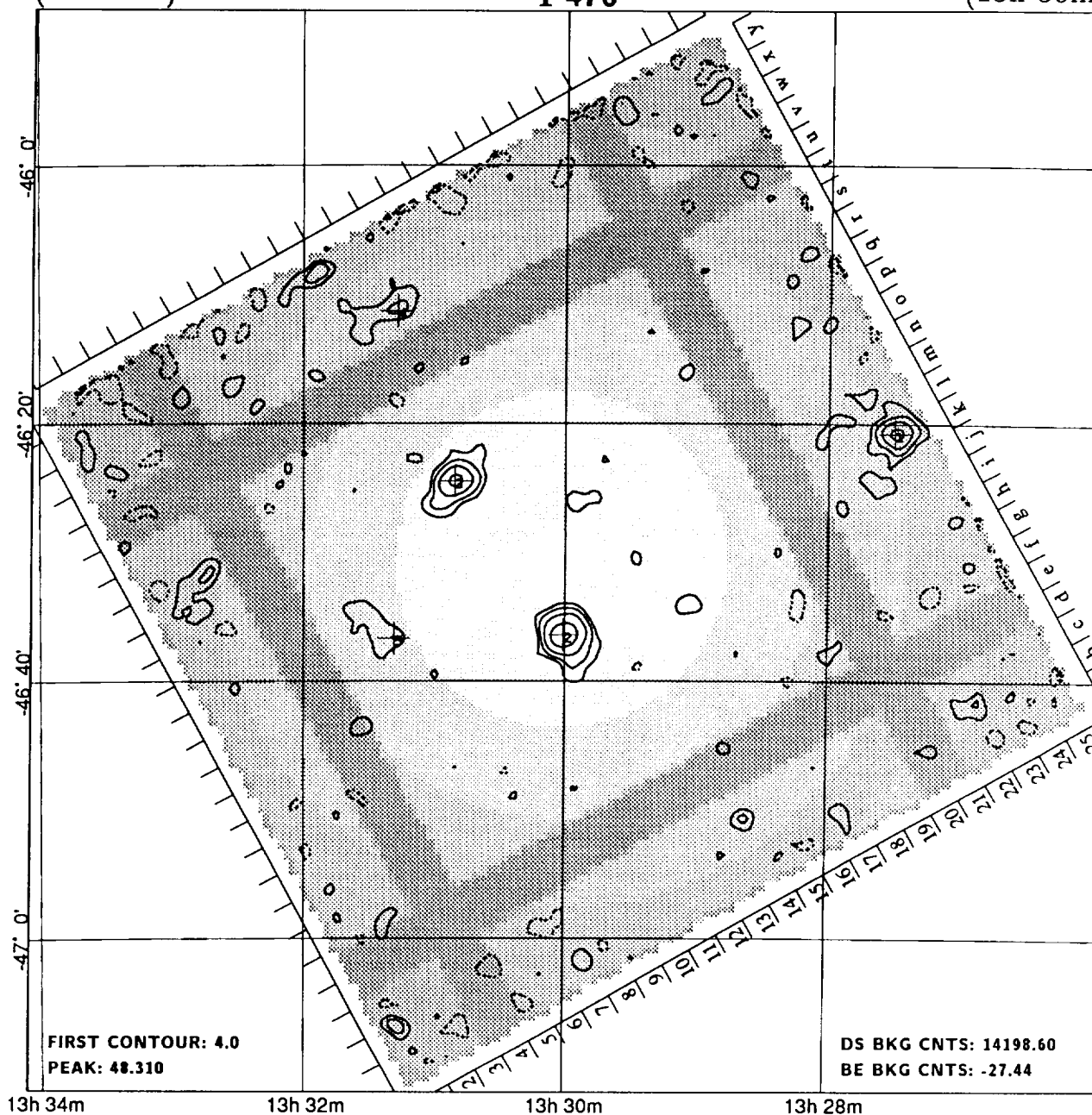
DATE: 1980/197 - 1980/197  
 LIVETIME: 556.2s  
 ROLL ANGLE: 68.4°

NH: 3.5E+20  
 REF/ID:  
 FIELD FLAGS:

(13h 30m)

I 476

(13h 30m)



## CEN-A GIANT RADIO LOBES

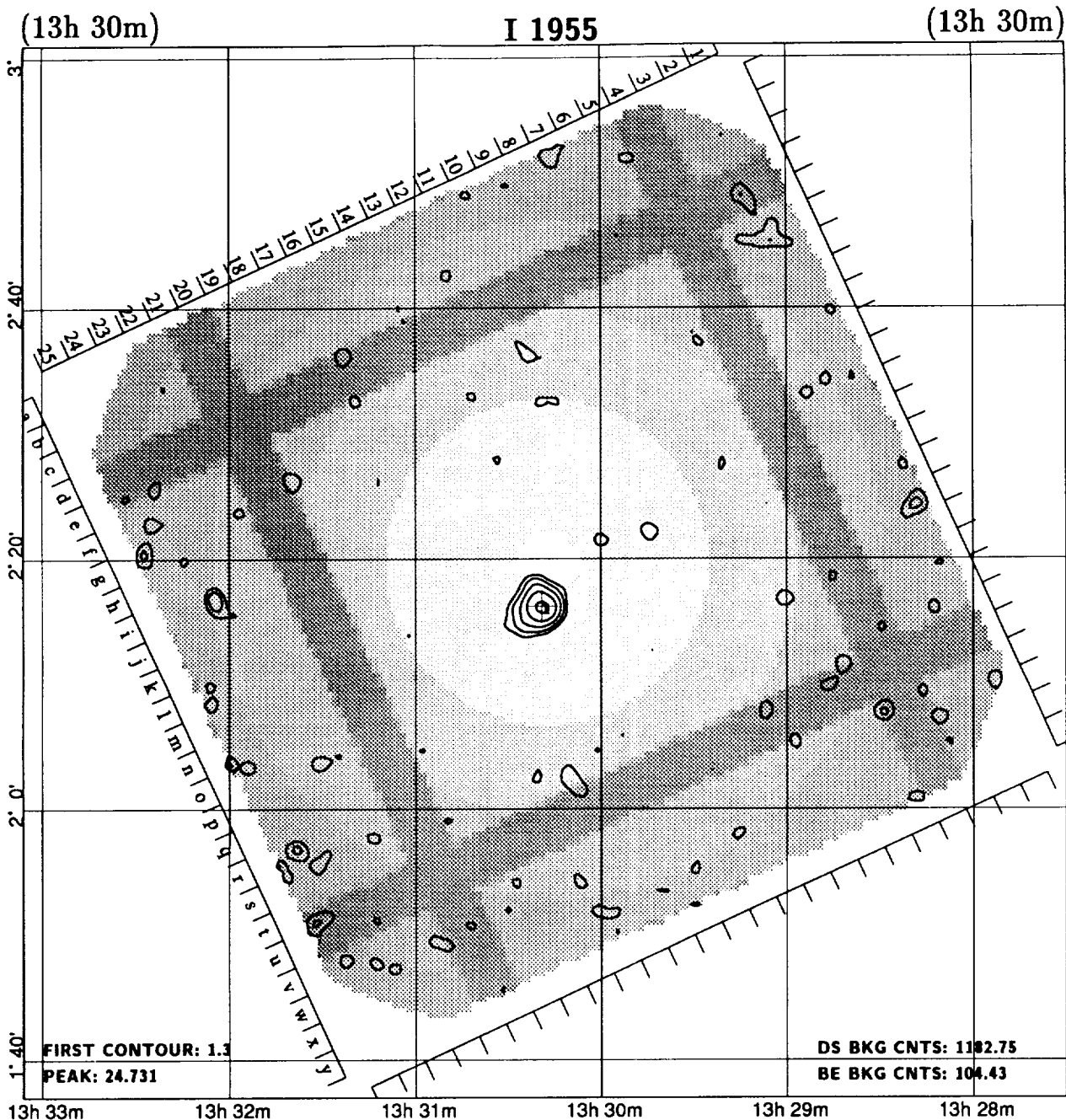
FIELD CENTER:  $13^h 30^m 00.0^s$   $-46^\circ 29' 59''$  (B1950)  
 $13^h 33^m 01.2^s$   $-46^\circ 45' 23''$  (J2000)  
 $l: 310.30$   $b: 15.52$

DATE: 1979/ 34 - 1979/ 35  
 LIVETIME: 11505.6s  
 ROLL ANGLE:  $-119.1^\circ$

NH:  $1.1E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3066	1	13 27 30.1	-46 20 46	50	0.0163	0.0022	71.9	21.1	7.5	1.1	0	27.3	H	S
3080	2	13 30 00.8	-46 36 24	38	0.0261	0.0019	212.2	32.8	13.6	1.5	0	6.3	H	S
3084	3	13 30 50.8	-46 24 31	38	0.0178	0.0017	135.1	33.9	10.4	1.3	0	10.2	H	
3085	4	13 31 16.9	-46 11 15	56	0.0046	0.0013	24.3	21.7	3.6	1.5	100	23.2		
3086	5	13 31 18.6	-46 36 40	56	0.0039	0.0011	26.5	27.5	3.6	1.3	0	15.6	H	



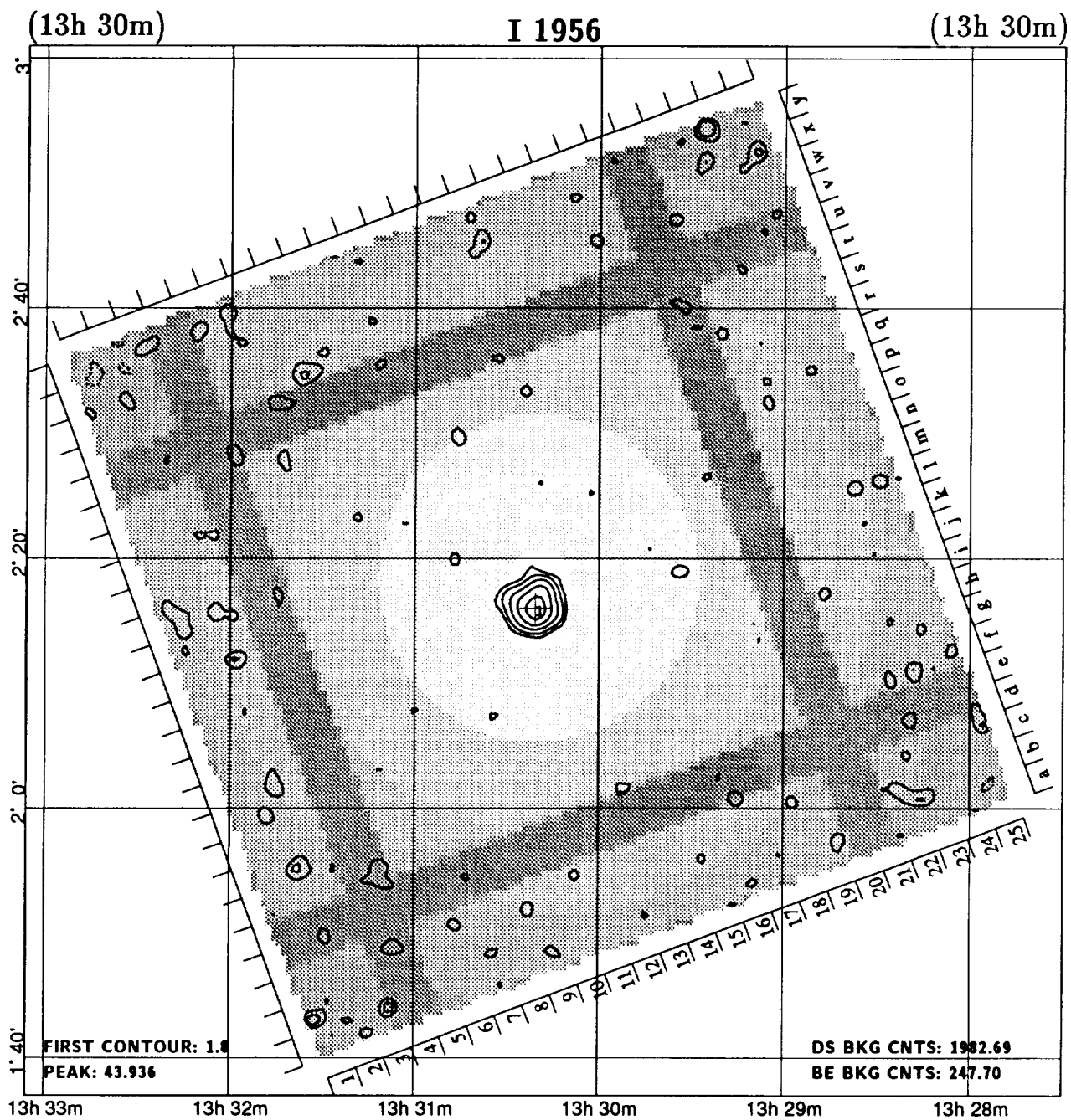


**FIELD CENTER:**  $13^h 30^m 18.0^s$   $02^\circ 18' 59''$  (B1950)  
 $13^h 32^m 50.7^s$   $02^\circ 03' 36''$  (J2000)  
 $l: 326.27$   $b: 63.04$

**DATE:** 1979/179 - 1979/179  
**LIVETIME:** 958.4s  
**ROLL ANGLE:**  $65.4^\circ$

**NH:**  $1.8E+20$   
**REF/ID:**  
**FIELD FLAGS:** C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3081	1	13 30 19.2	02 16 14	31	0.138	0.014	95.7	3.3	9.6	1.1	0	2.8	AH	



3C 287.1: SEYFERT AND N-TYPE GALAXIES

FIELD CENTER:  $13^{\text{h}}30^{\text{m}}18.0^{\text{s}}$   $02^{\circ}18'59''$  (B1950)  
 $13^{\text{h}}32^{\text{m}}50.7^{\text{s}}$   $02^{\circ}03'36''$  (J2000)  
 $l$ : 326.27  $b$ : 63.04

DATE: 1980/ 19 - 1980/ 19  
 LIVETIME: 1606.6s  
 ROLL ANGLE:  $-110.4^{\circ}$

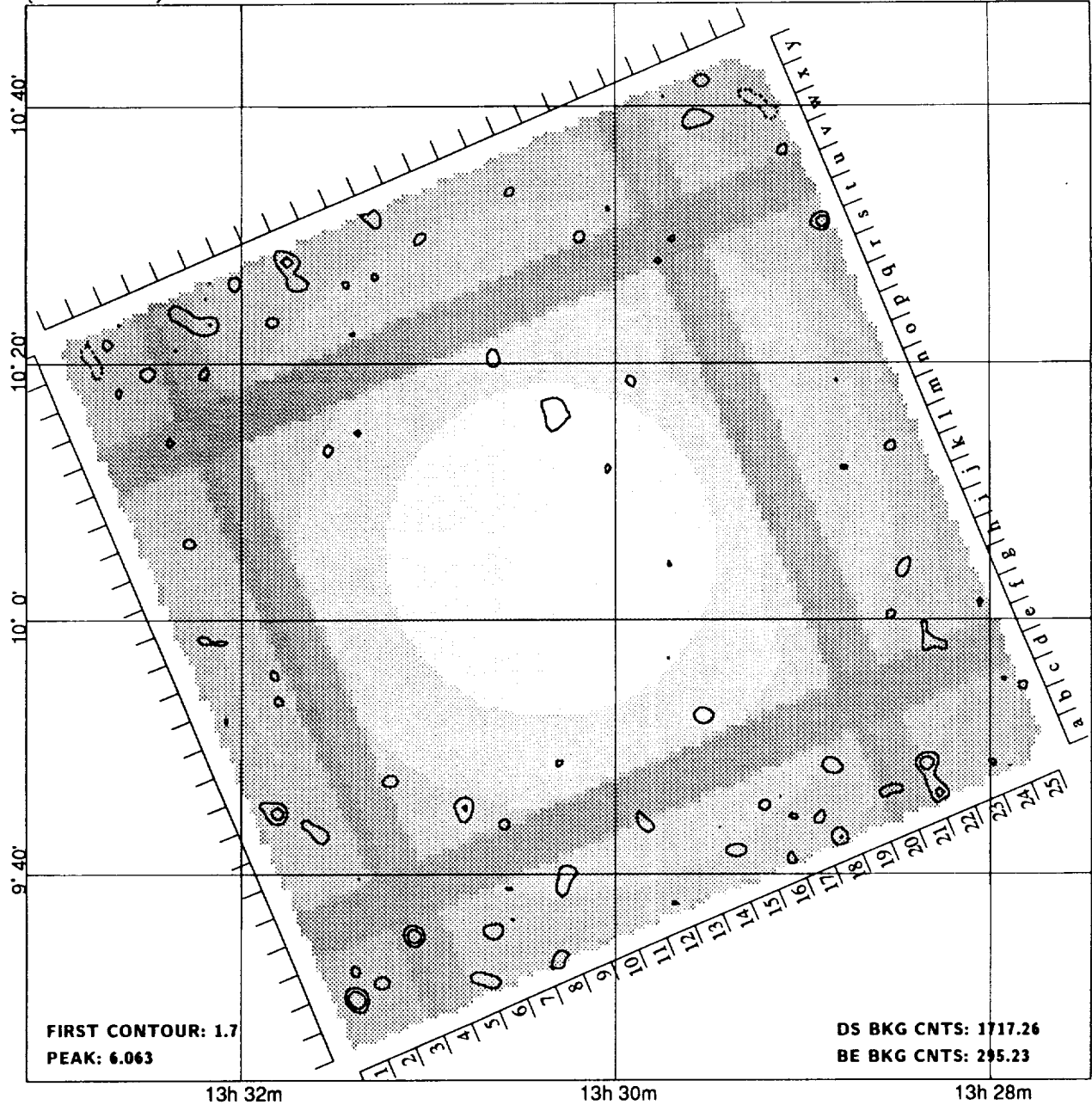
NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3081	1	13 30 20.6	02 16 03	31	0.145	0.011	171.6	5.4	12.9	1.3	0	2.9	AH	

(13h 30m)

I 10352

(13h 30m)

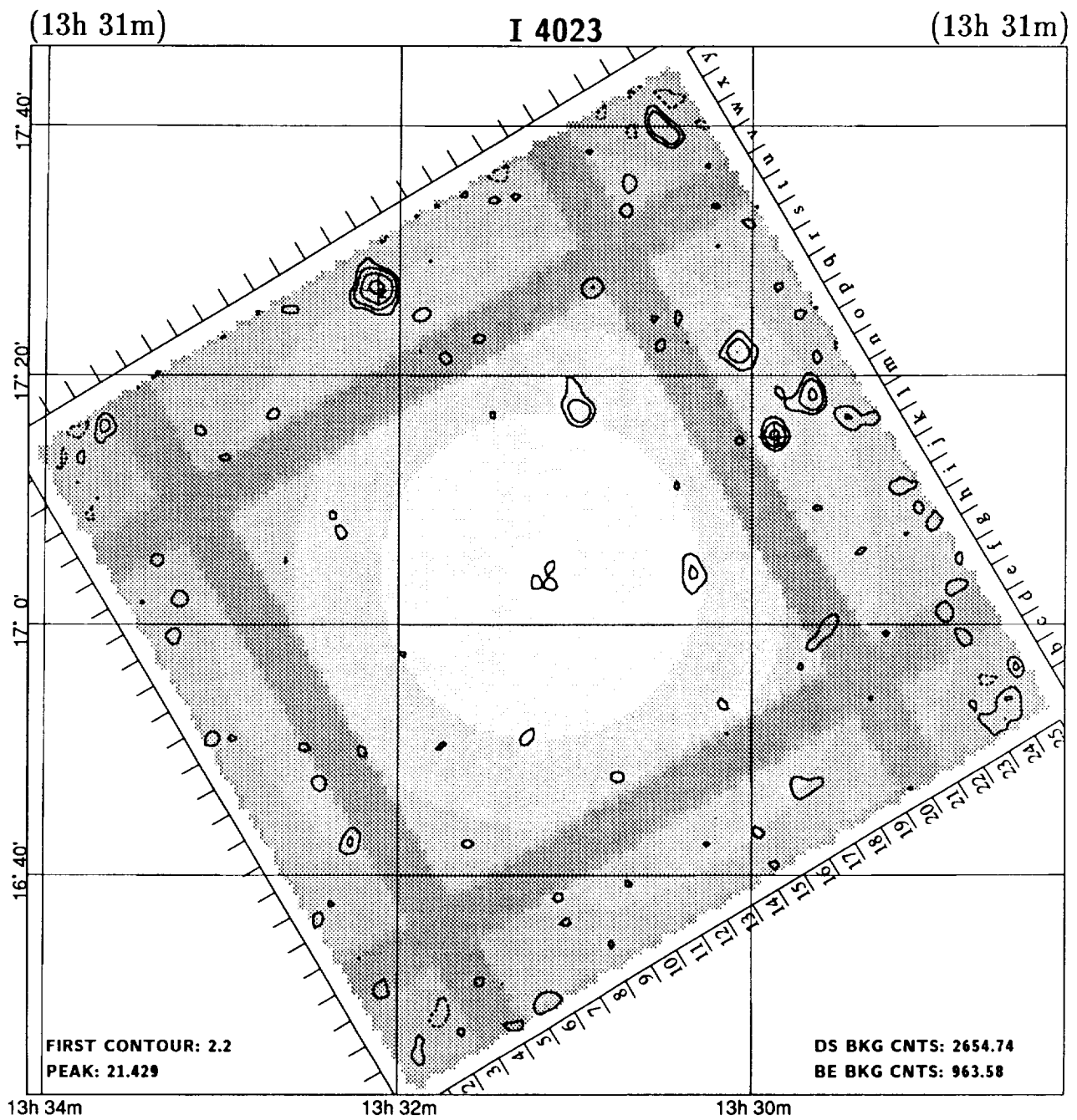


**GALAXY & QSO**

FIELD CENTER:  $13^{\text{h}}30^{\text{m}}18.0^{\text{s}}$   $10^{\circ}05'59''$  (B1950)  
 $13^{\text{h}}32^{\text{m}}47.2^{\text{s}}$   $09^{\circ}50'36''$  (J2000)  
 $l$ : 334.32  $b$ : 70.15

DATE: 1981/ 6 - 1981/ 6  
LIVETIME: 1391.5s  
ROLL ANGLE: -113.0°

NH: 1.9E+20  
REF/ID:  
FIELD FLAGS:



**QUASAR 1331+170**

**FIELD CENTER:**  $13^{\text{h}}31^{\text{m}}10.0^{\text{s}}$   $17^{\circ}04'23''$  (B1950)  
 $13^{\text{h}}33^{\text{m}}35.7^{\text{s}}$   $16^{\circ}49'02''$  (J2000)  
 $l: 348.50$   $b: 75.81$

**DATE:** 1979/354 - 1979/354  
**LIVETIME:** 2151.2s  
**ROLL ANGLE:** -120.9°

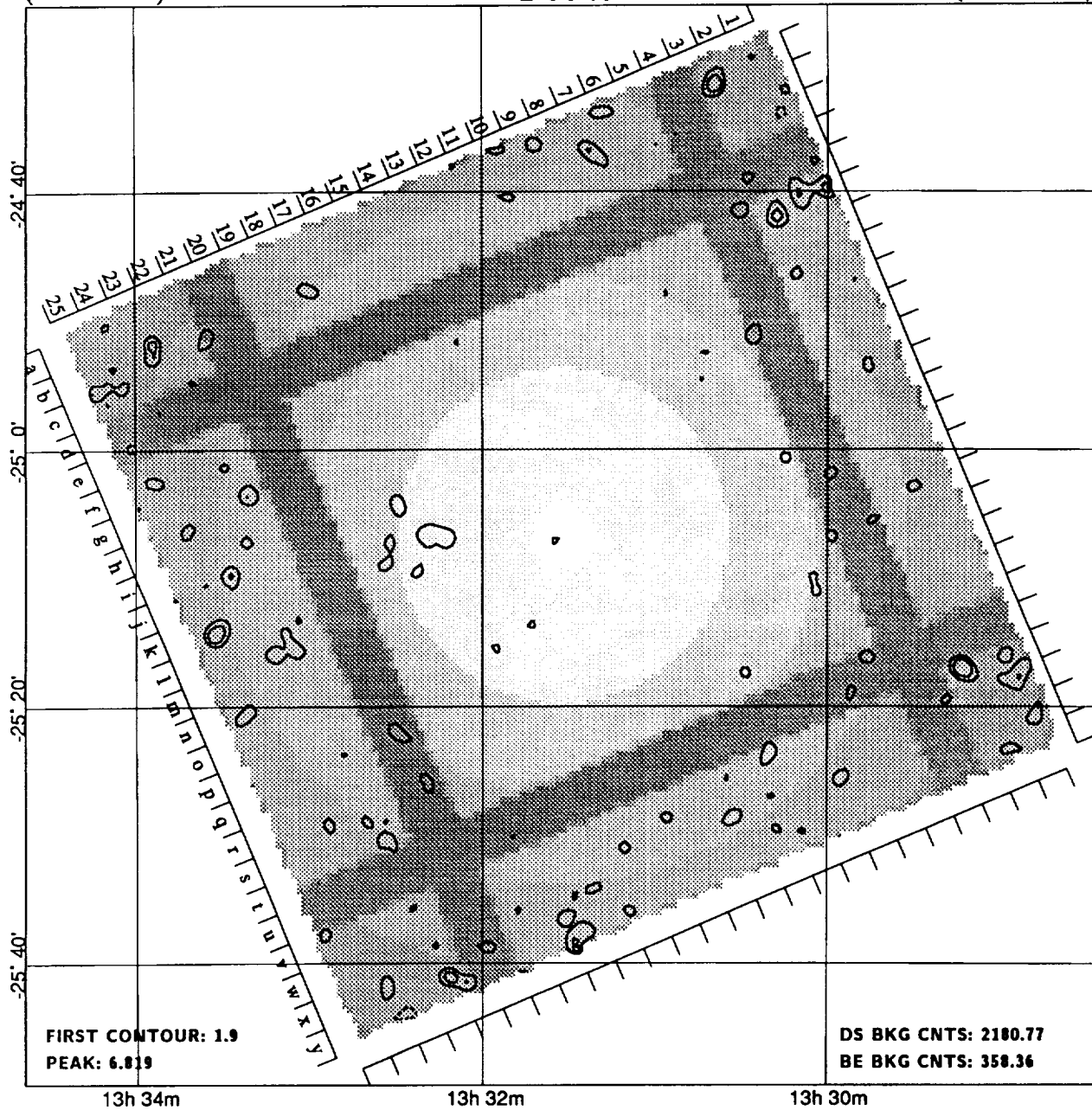
**NH:** 1.7E+20  
**REF/ID:** !  
**FIELD FLAGS:** L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3079	1L	13 29 52.4	17 15 06	52	0.0212	0.0057	21.8	4.2	3.5	0.7	200	21.4		
3093	2L	13 32 07.4	17 26 50	50	0.0541	0.0098	47.1	8.9	5.3	1.1	0	26.3		

(13h 31m)

I 7747

(13h 31m)



## RW HYDRAE, HIGH-EXCITATION SYMBIOTIC STAR

FIELD CENTER:  $13^h 31^m 32.6^s$   $-25^\circ 07' 31''$  (B1950)  
 $13^h 34^m 18.8^s$   $-25^\circ 22' 52''$  (J2000)  
 $l: 315.00$   $b: 36.48$

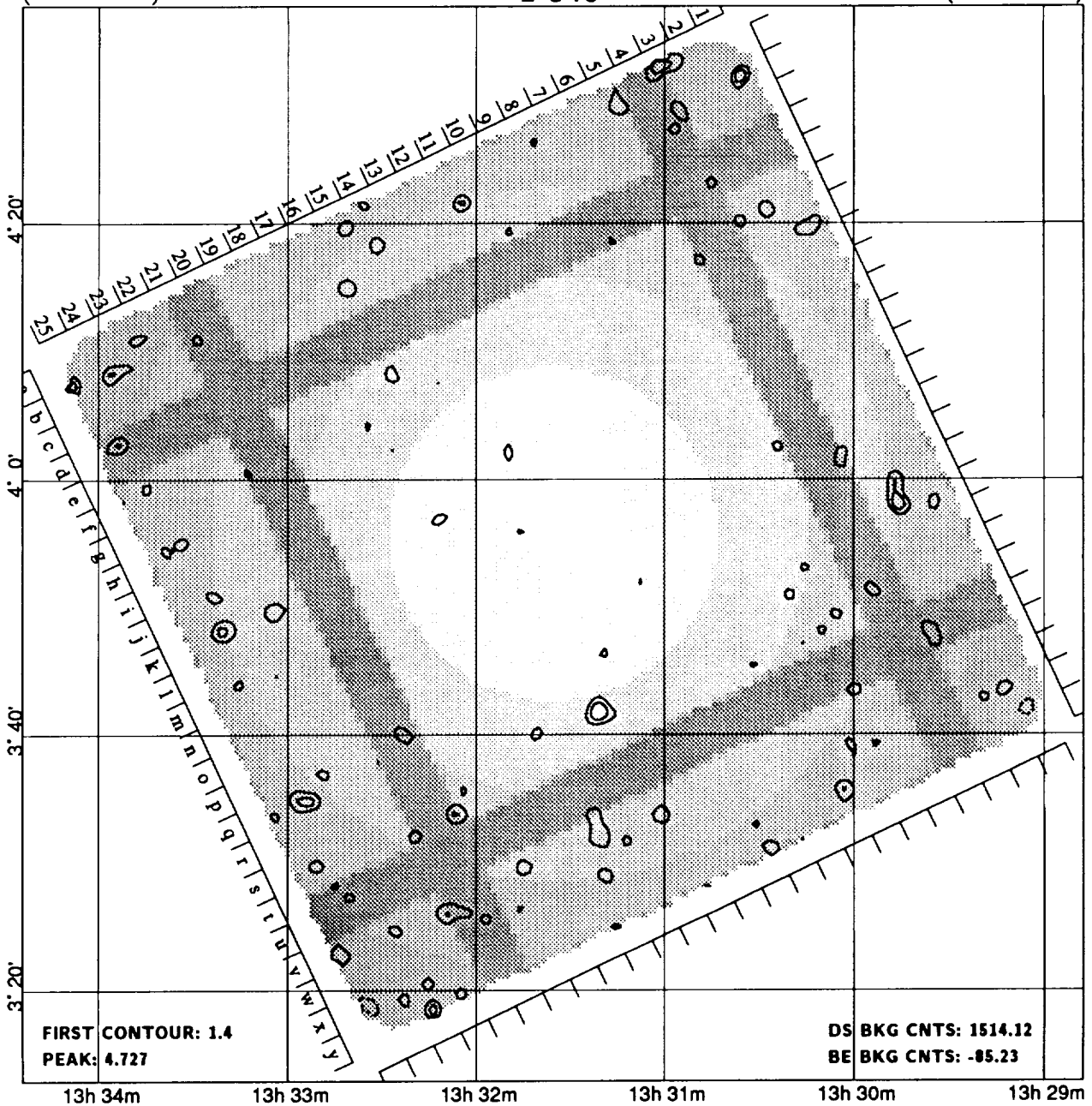
DATE: 1980/207 - 1980/207  
 LIVETIME: 1767.1s  
 ROLL ANGLE:  $67.2^\circ$

NH:  $5.1E+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 31m)

I 840

(13h 31m)



## OMICRON VIR (HD118022) STELLAR OBSERVATIONS, A STARS

FIELD CENTER:  $13^{\text{h}}31^{\text{m}}35.8^{\text{s}}$   $03^{\circ}54'53''$  (B1950)  
 $13^{\text{h}}34^{\text{m}}07.8^{\text{s}}$   $03^{\circ}39'32''$  (J2000)  
 $l$ : 328.27  $b$ : 64.41

DATE: 1979/178 - 1979/178  
 LIVETIME: 1226.9s  
 ROLL ANGLE:  $64.8^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 31m)



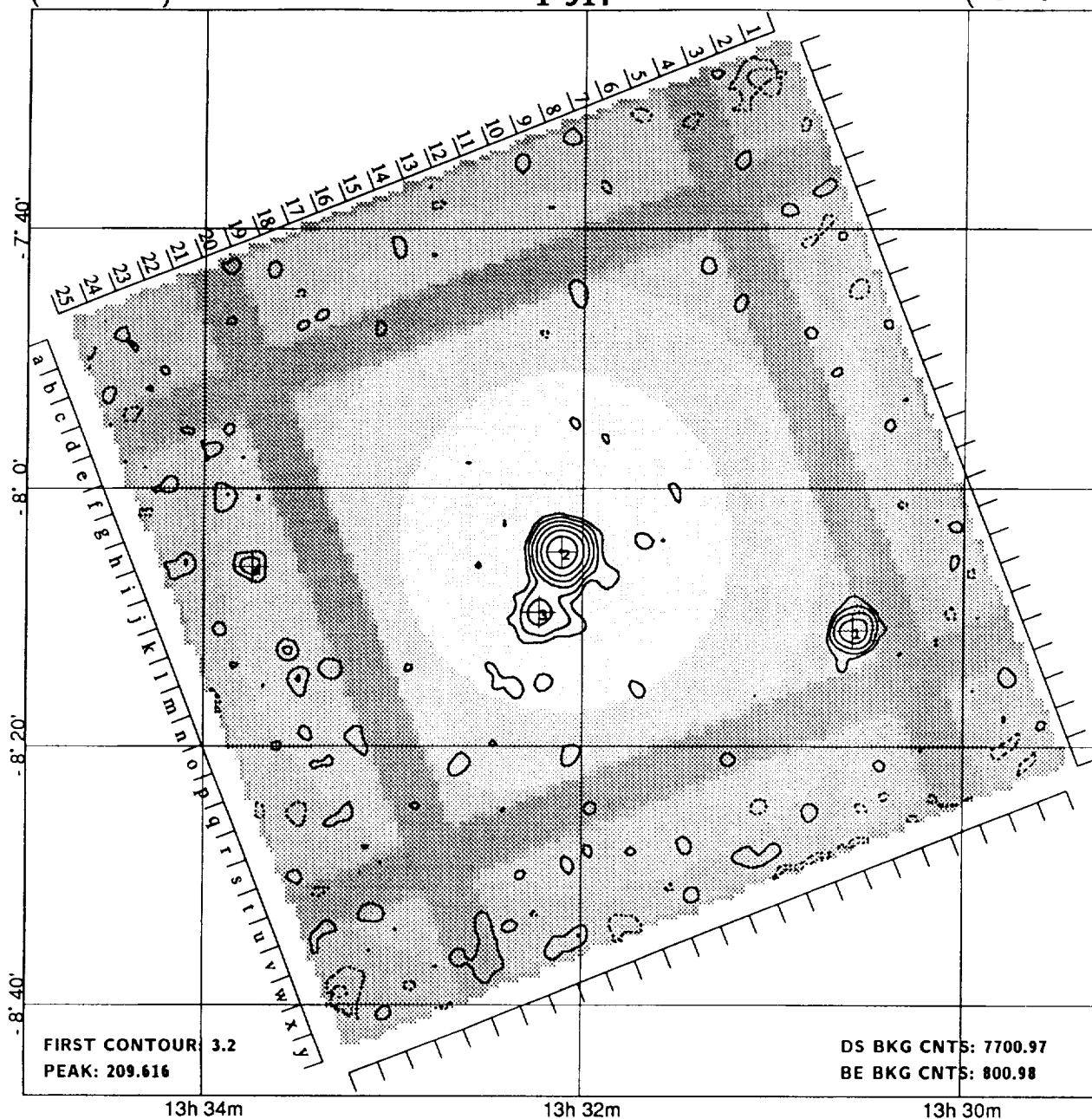
NH: 1.5E+21  
REF/ID: S  
FIELD FLAGS:



(13h 32m)

I 917

(13h 32m)



## EQ VIR STELLAR OBSERVATIONS, VARIABLE STARS

FIELD CENTER:  $13^{\text{h}}32^{\text{m}}06.2^{\text{s}}$   $-08^{\circ}05'06''$  (B1950)  
 $13^{\text{h}}34^{\text{m}}43.8^{\text{s}}$   $-08^{\circ}20'27''$  (J2000)  
 $l: 320.92$   $b: 53.01$

DATE: 1979/203 - 1979/203  
 LIVETIME: 6240.3s  
 ROLL ANGLE:  $68.6^{\circ}$

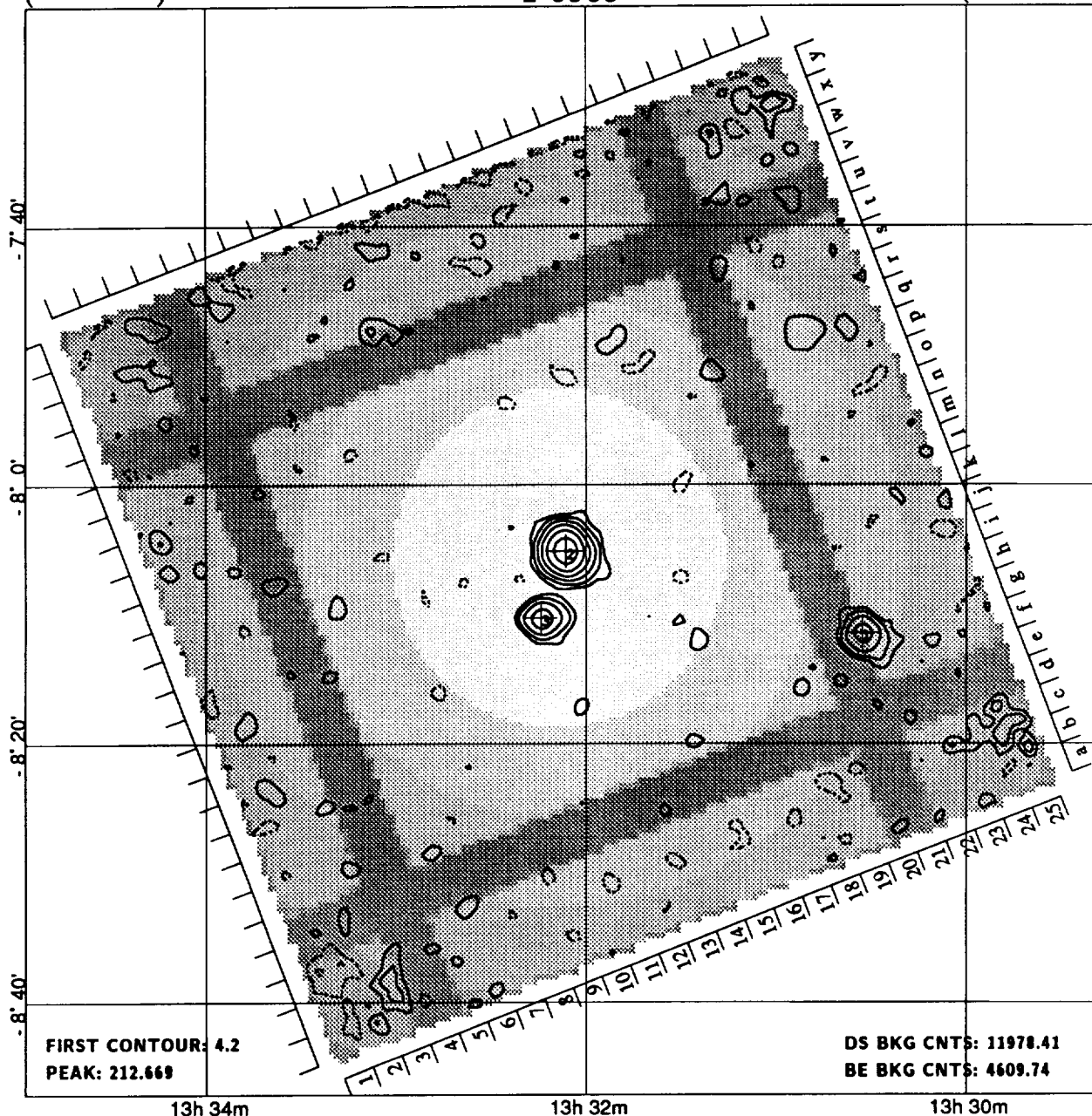
NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3082	1	13 30 34.7	-08 11 06	48	*0.0428	0.0041	121.8	13.2	10.5	1.1	701	23.6	AH	S
3091	2	13 32 06.7	-08 04 59	31	0.2014	0.0067	935.5	21.5	30.2	1.5	0	0.2	AH	S
3095	3	13 32 13.7	-08 09 40	34	0.0183	0.0023	80.8	18.2	8.1	15.3	0	5.0	AH	
3107	4	13 33 44.7	-08 06 09	55	0.0088	0.0023	23.8	15.2	3.8	0.7	0	24.4		

(13h 32m)

I 6969

(13h 32m)



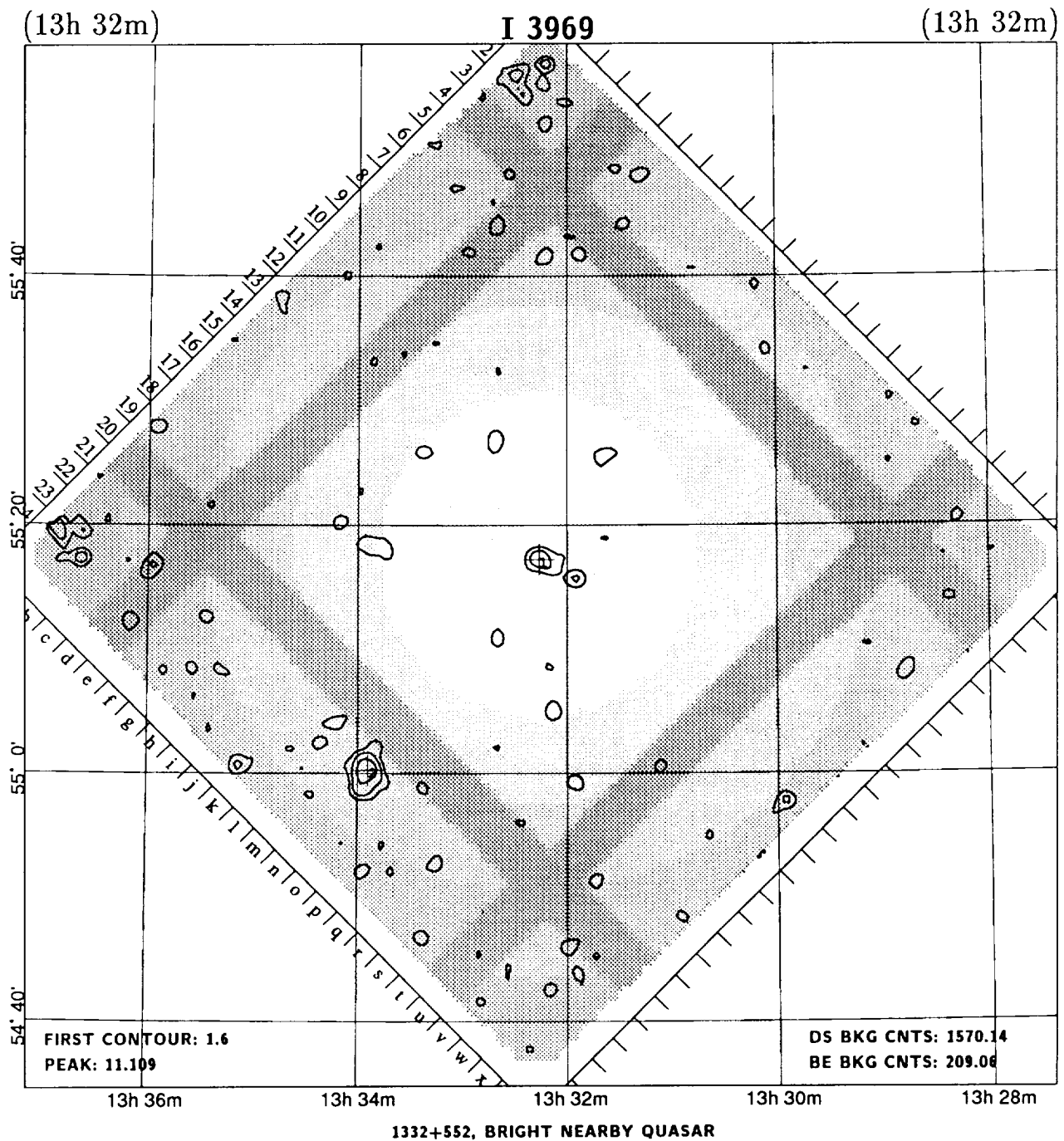
## DM-7(3646), STELLAR X-RAY VARIABILITY STUDIES

FIELD CENTER:  $13^{\text{h}}32^{\text{m}}07.0^{\text{s}}$   $-08^{\circ}05'05''$  (B1950)  
 $13^{\text{h}}34^{\text{m}}44.6^{\text{s}}$   $-08^{\circ}20'26''$  (J2000)  
 $l$ : 320.92  $b$ : 53.01

DATE: 1981/ 32 - 1981/ 33  
 LIVETIME: 9706.5s  
 ROLL ANGLE:  $-111.1^{\circ}$

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3082	1L	13 30 32.7	-08 11 22	48	*0.0169	0.0043	72.2	35.8	3.8	1.2	905	24.2	A S	
3091	2L	13 32 06.5	-08 05 06	31	0.1174	0.0050	848.1	144.9	23.4	1.2	0	0.0	A S	
3095	3L	13 32 14.2	-08 10 12	38	0.0234	0.0025	162.8	58.2	9.2	1.1	0	5.5	A	



FIELD CENTER:  $13^h 32^m 15.8^s$   $55^\circ 16' 45''$  (B1950)  
 $13^h 34^m 11.6^s$   $55^\circ 01' 25''$  (J2000)  
 $l: 110.25$   $b: 61.04$

DATE: 1980/157 - 1980/157  
 LIVETIME: 1272.3s  
 ROLL ANGLE:  $45.2^\circ$

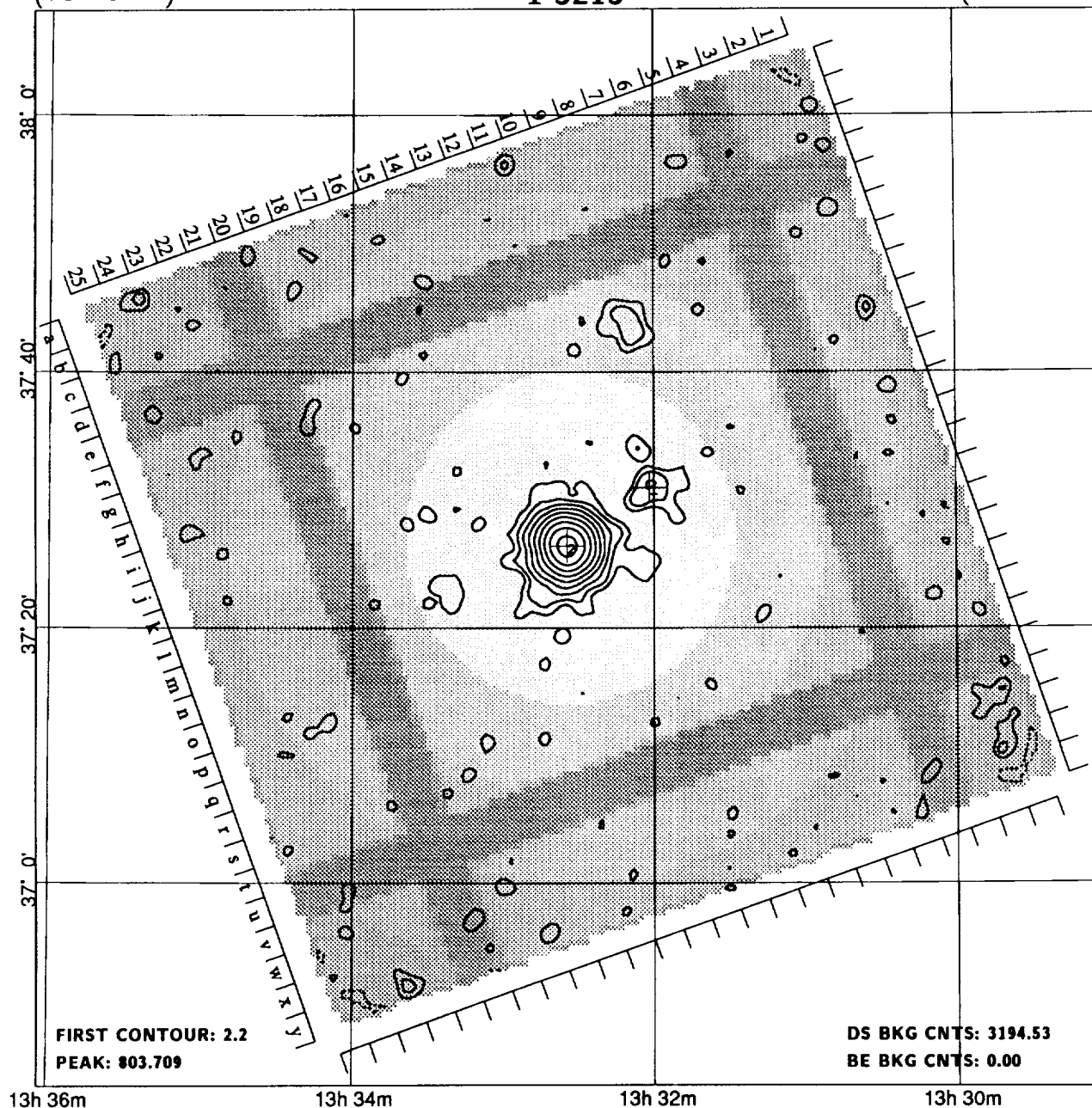
NH:  $1.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3097	1	13 32 16.1	55 17 12	37	0.0173	0.0048	16.5	4.5	3.6	0.8	0	0.4	H	
3111	2	13 33 54.0	55 00 14	51	0.0399	0.0086	24.0	3.0	4.6	1.1	100	21.7	H	

(13h 32m)

I 3213

(13h 32m)



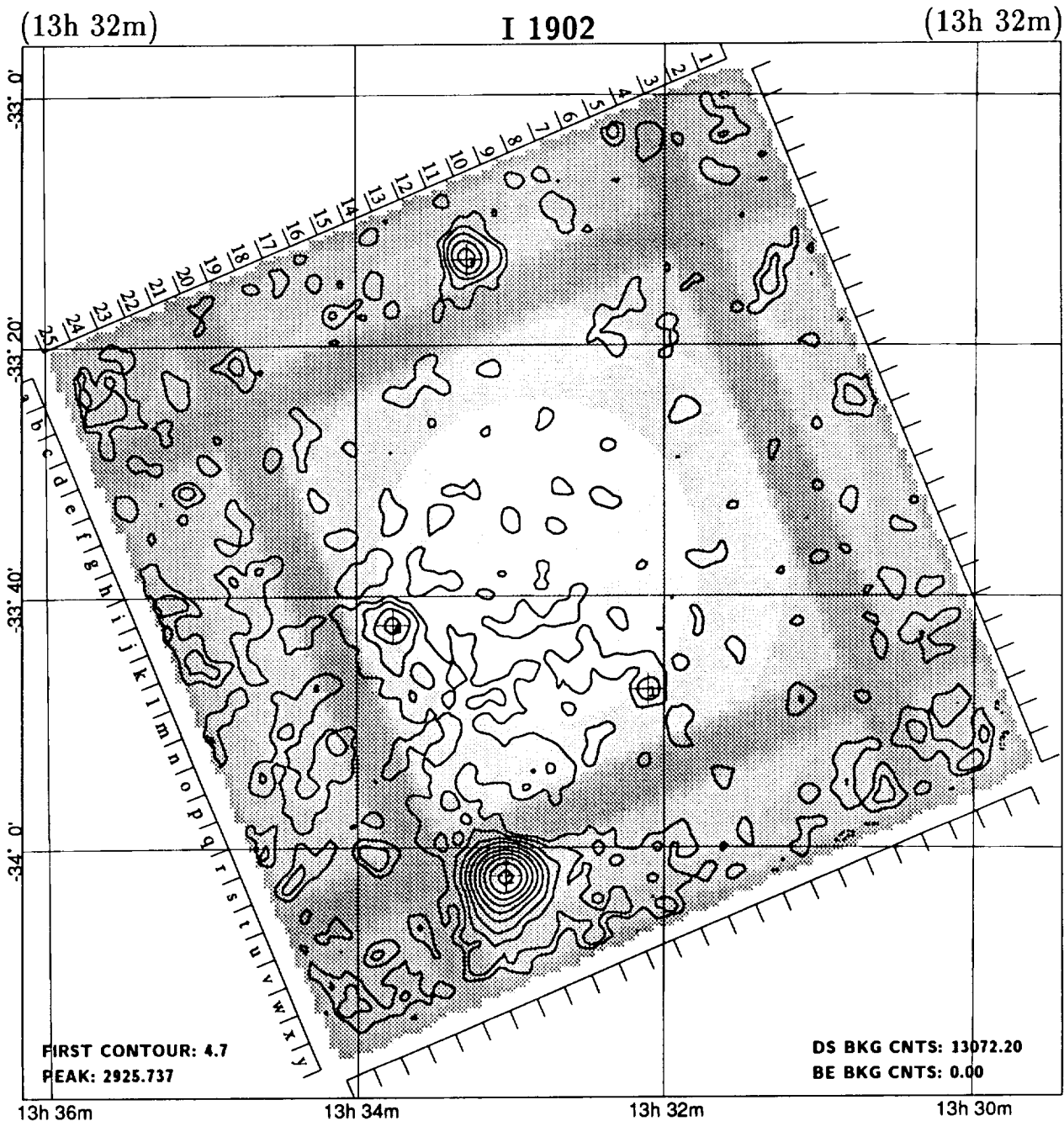
RS CVN SYSTEMS: HR 5110

FIELD CENTER:  $13^{\text{h}}32^{\text{m}}33.9^{\text{s}}$   $37^{\circ}26'16''$  (B1950)  
 $13^{\text{h}}34^{\text{m}}47.4^{\text{s}}$   $37^{\circ}10'57''$  (J2000)  
 $l: 83.33$   $b: 76.41$

DATE: 1979/192 - 1979/192  
 LIVETIME: 2588.6s  
 ROLL ANGLE:  $70.5^{\circ}$

NH:  $8.1\text{E}+19$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3089	1L	13 32 01.8	37 30 57	41	0.0198	0.0048	35.5	16.5	4.0	1.5	0	7.2		
3098	2L	13 32 34.7	37 26 22	31	1.542	0.035	2972.3	473.7	44.3	1.4	0	0.1		CV



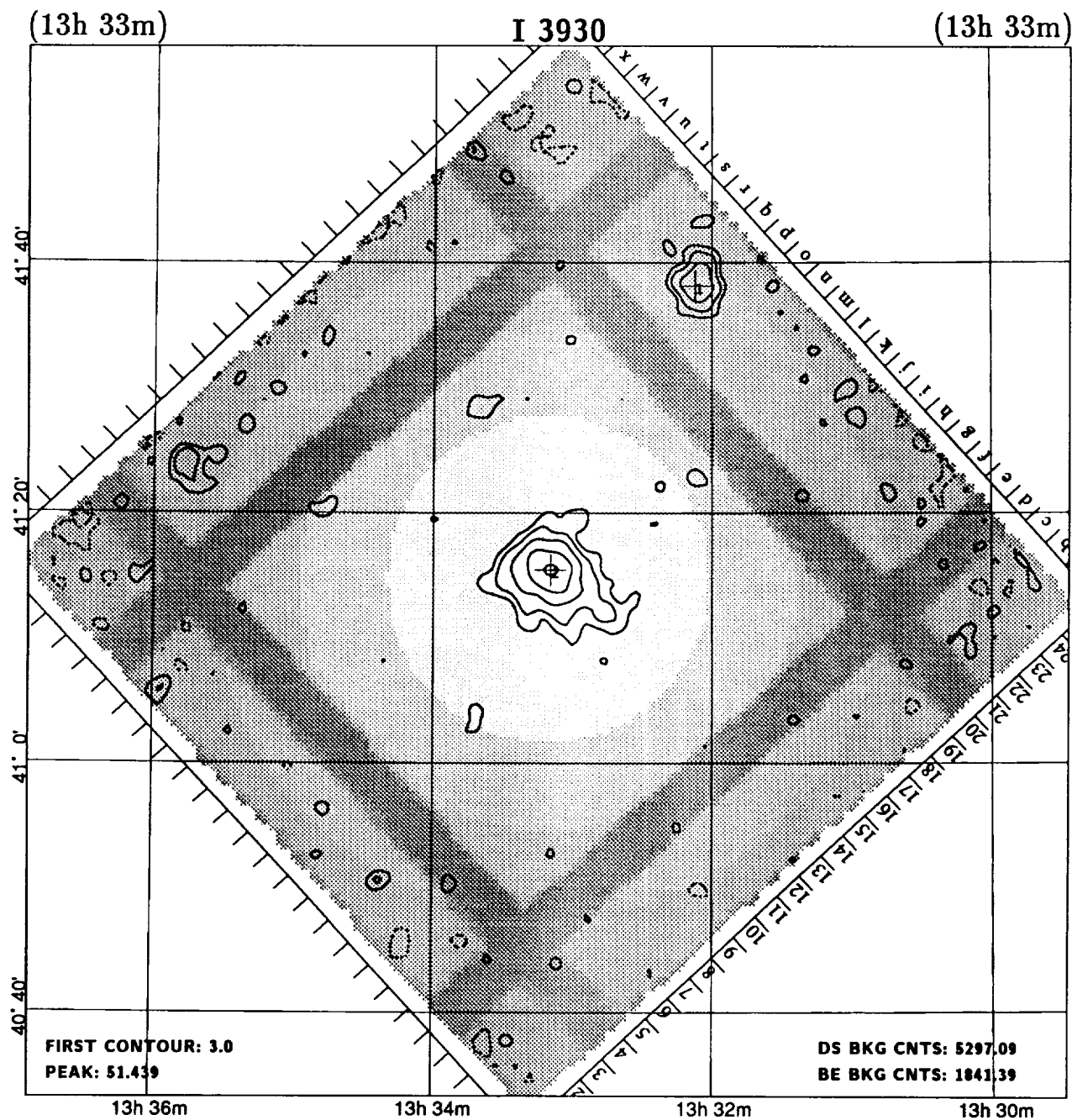
IC4296=1332-33: X-RAY STUDY OF RADIO GALAXIES

FIELD CENTER:  $13^{\text{h}}32^{\text{m}}48.0^{\text{s}}$   $-33^{\circ}37'59''$  (B1950)  
 $13^{\text{h}}35^{\text{m}}39.6^{\text{s}}$   $-33^{\circ}53'18''$  (J2000)  
 $l: 313.33$   $b: 28.09$

DATE: 1980/207 - 1980/207  
 LIVETIME: 10592.7s  
 ROLL ANGLE:  $67.2^{\circ}$

NH:  $4.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3090	1L	13 32 06.2	-33 47 24	45	0.0077	0.0017	50.4	35.6	4.4	2.5	0	13.1		
3102	2L	13 33 01.8	-34 02 15	47	*1.572	0.027	7141.3	631.7	58.2	1.5	703	24.4		
3104	3L	13 33 16.7	-33 13 12	47	0.0463	0.0040	213.0	42.0	11.4	1.3	200	25.5		
3108	4L	13 33 45.8	-33 42 17	38	0.0174	0.0025	115.8	71.2	6.9	85.1	0	12.7		G



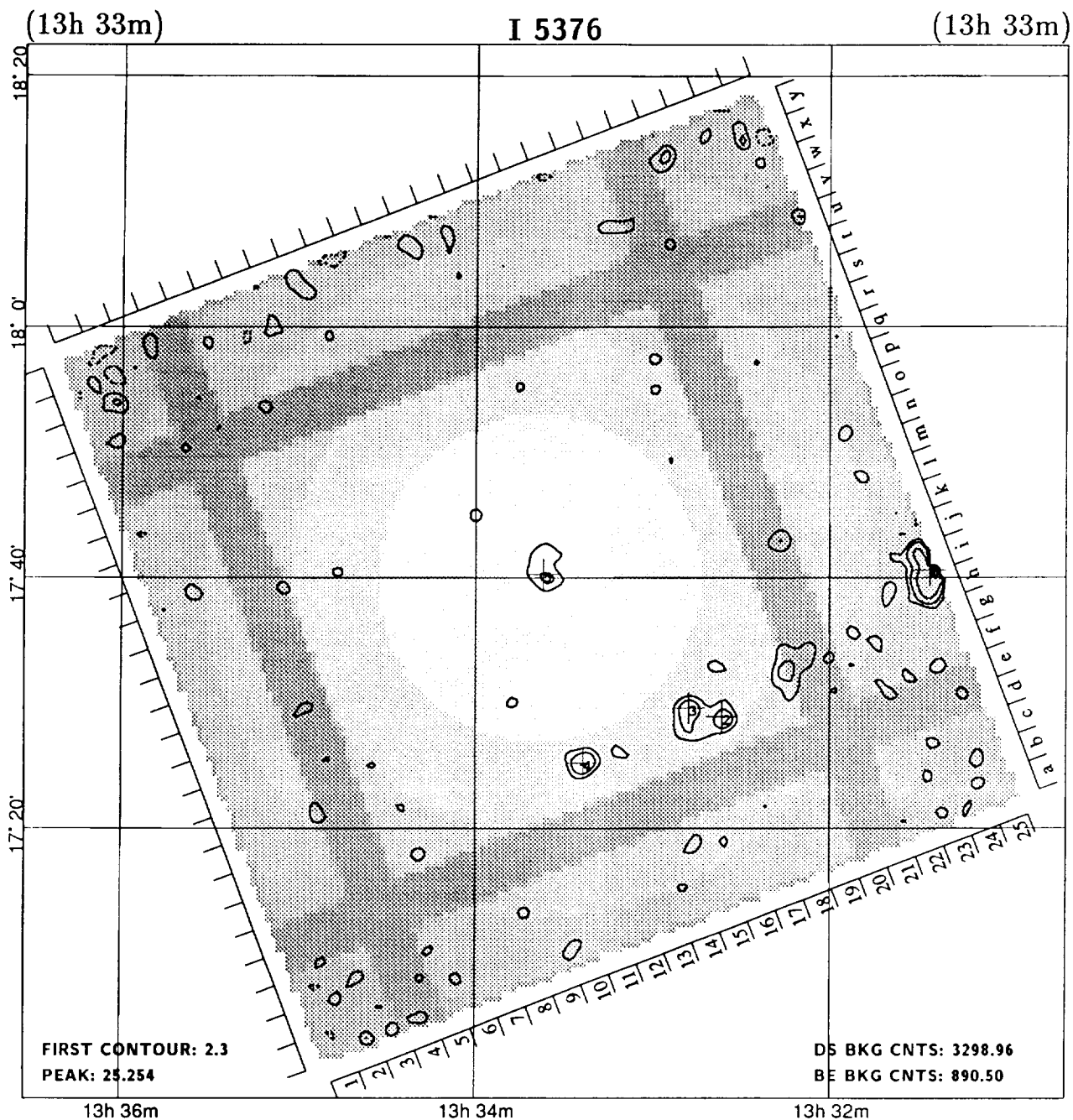
CLASSICAL DOUBLES IN RICH CLUSTERS

FIELD CENTER:  $13^h 33^m 10.0^s$   $41^\circ 15' 19''$  (B1950)  
 $13^h 35^m 20.4^s$   $41^\circ 00' 01''$  (J2000)  
 $l: 92.65$   $b: 73.45$

DATE: 1979/342 - 1979/342  
 LIVETIME: 4292.4s  
 ROLL ANGLE:  $-132.7^\circ$

NH:  $9.1E+19$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3092	1	13 32 07.3	41 38 06	50	0.0322	0.0047	56.7	11.3	6.9	1.5	0	25.9	H	
3103	2	13 33 09.5	41 15 28	31	0.0788	0.0052	251.8	19.2	15.3	2.9	0	0.2	H	CLG



FIELD CENTER:  $13^h 33^m 36.7^s$   $17^\circ 40' 30''$  (B1950)  
 $13^h 36^m 01.9^s$   $17^\circ 25' 13''$  (J2000)  
 $l$ : 351.92  $b$ : 75.85

DATE: 1981/ 11 - 1981/ 11  
 LIVETIME: 2673.3s  
 ROLL ANGLE:  $-110.9^\circ$

NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS:

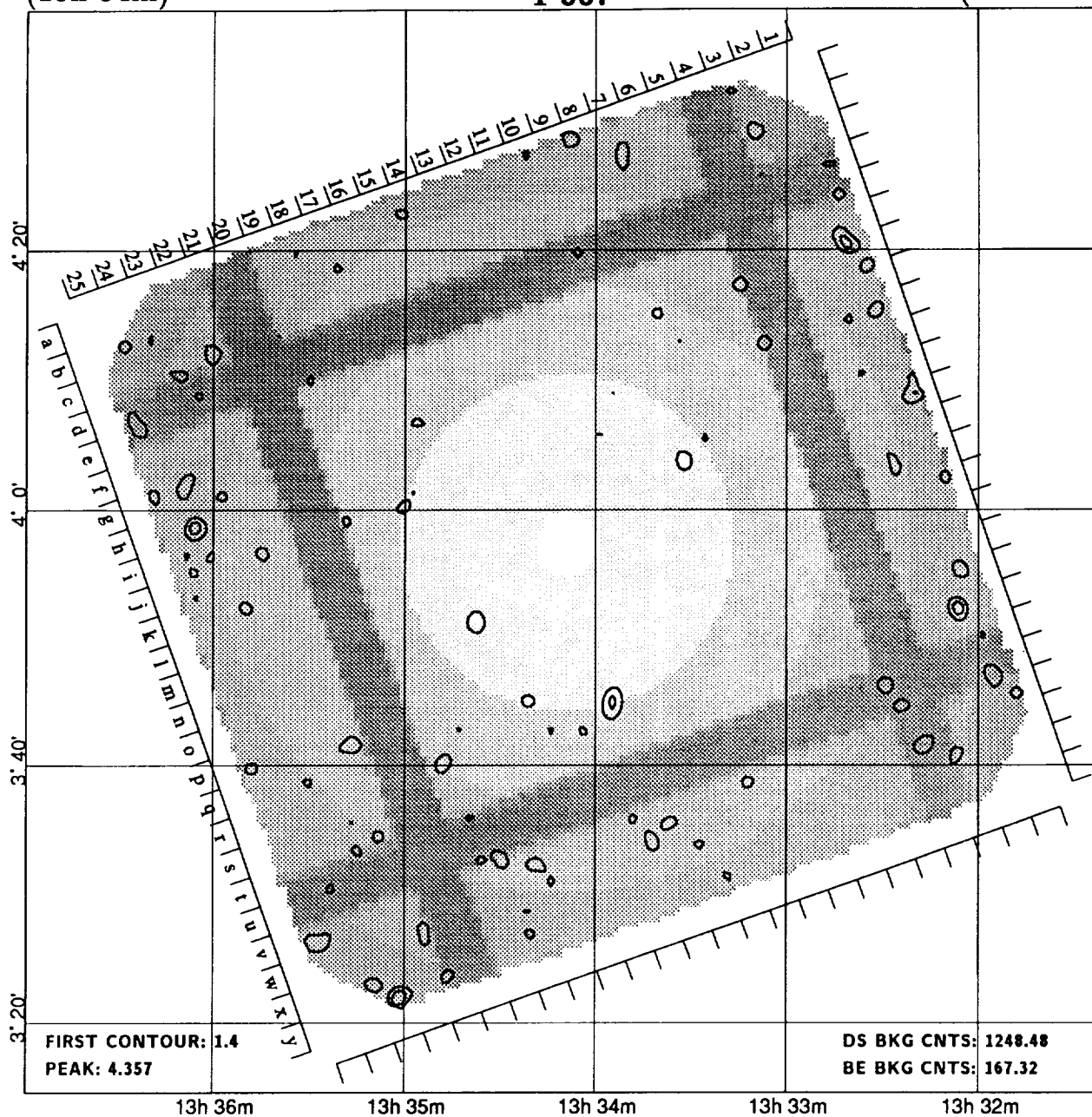
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3087	1	13 31 26.2	17 40 36	51	*0.059	0.010	39.0	5.0	5.9	1.9	804	31.1	EH	
3099	2	13 32 36.3	17 28 54	54	0.0130	0.0036	18.6	8.4	3.6	1.9	0	18.4	H	
3101	3	13 32 47.5	17 29 36	52	0.0134	0.0035	20.6	8.4	3.8	1.9	0	15.8	H	
3105	4	13 33 23.3	17 25 12	51	0.0151	0.0036	23.8	8.2	4.2	0.7	0	15.6		
3106	5	13 33 37.1	17 40 17	37	0.0097	0.0027	19.3	10.7	3.5	1.0	0	0.2	H	Q



(13h 34m)

I 887

(13h 34m)

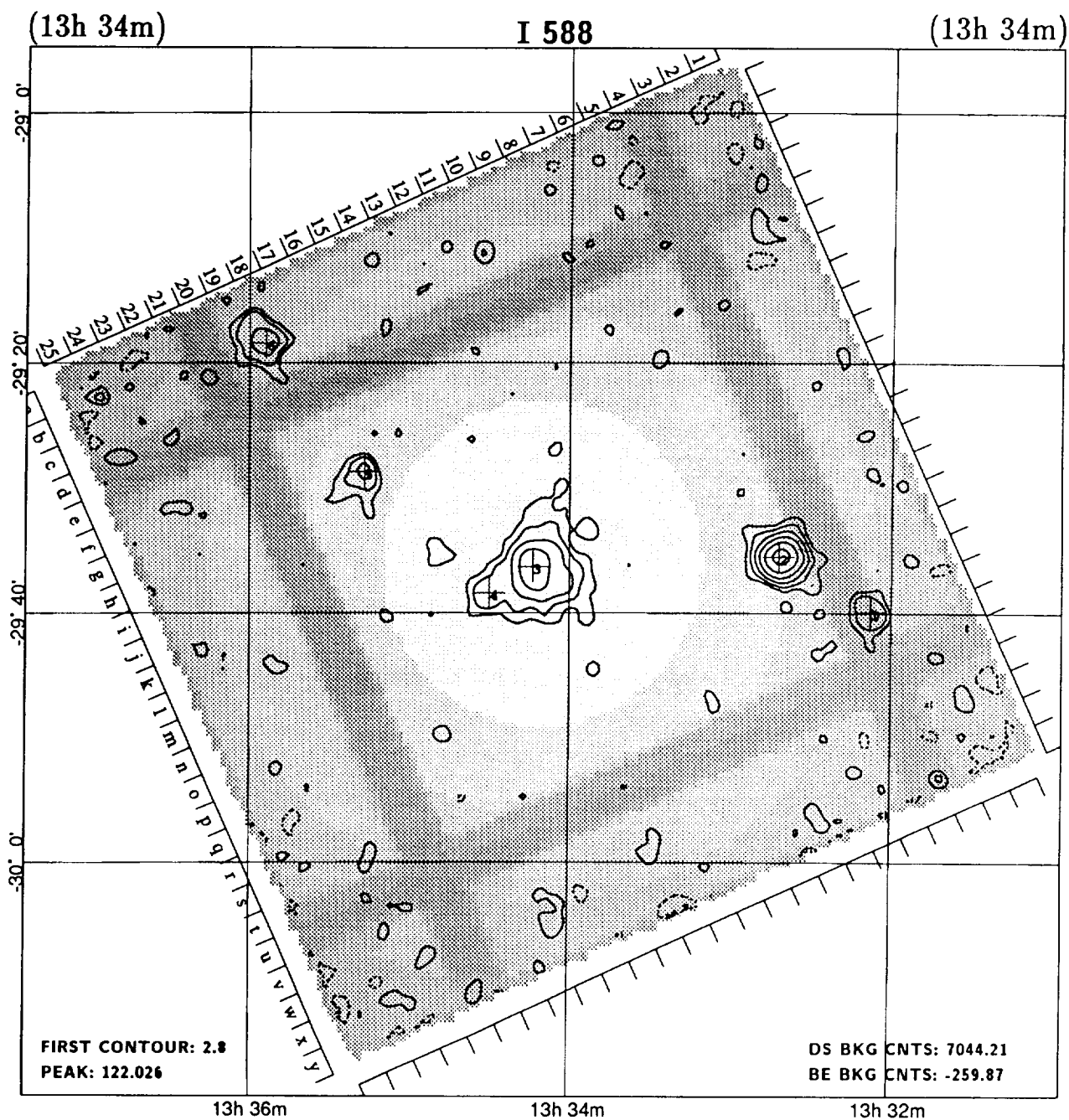


## EG 100 (W489) STELLAR OBSERVATIONS, WHITE DWARFS

FIELD CENTER:  $13^{\text{h}}34^{\text{m}}10.0^{\text{s}}$   $03^{\circ}56'41''$  (B1950)  
 $13^{\text{h}}36^{\text{m}}41.9^{\text{s}}$   $03^{\circ}41'25''$  (J2000)  
 $l$ : 329.66  $b$ : 64.19

DATE: 1979/206 - 1979/206  
 LIVETIME: 1011.7s  
 ROLL ANGLE:  $70.6^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



NGC 5236 HIGH RESOLUTION STUDIES OF GALAXIES

FIELD CENTER:  $13^{\text{h}}34^{\text{m}}10.2^{\text{s}}$   $-29^{\circ}36'46''$  (B1950)  
 $13^{\text{h}}36^{\text{m}}59.4^{\text{s}}$   $-29^{\circ}52'02''$  (J2000)  
 $l$ : 314.58  $b$ : 31.97

DATE: 1979/212 - 1979/213  
 LIVETIME: 5708.1s  
 ROLL ANGLE: 65.7°

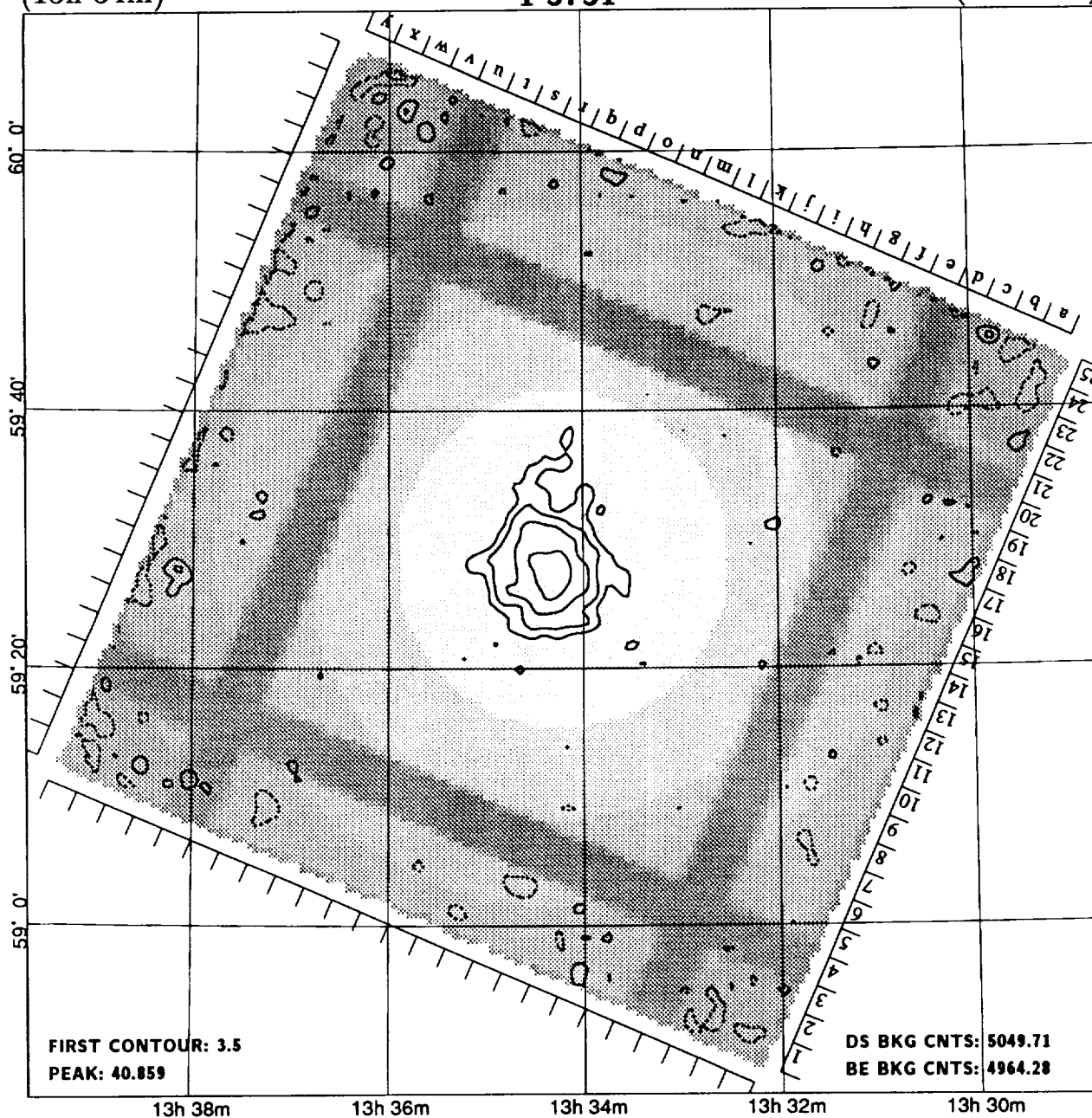
NH: 4.2E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3094	1	13 32 07.7	-29 39 54	54	*0.0145	0.0028	33.3	7.7	5.2	1.3	1209	26.1	H	S
3100	2	13 32 41.8	-29 35 28	47	0.1111	0.0062	333.1	9.9	18.0	1.3	400	19.4	H	*
3112	3	13 34 13.7	-29 36 18	31	0.0468	0.0035	198.9	18.1	13.5	2.9	0	1.0	H	G
3114	4	13 34 30.0	-29 38 24	35	0.0118	0.0020	48.2	18.8	5.9	11.3	0	4.6	H	G
3119	5	13 35 16.9	-29 28 42	51	0.0124	0.0022	40.4	12.6	5.6	1.2	0	16.7	H	CLG
3121	6	13 35 53.8	-29 18 24	51	0.0211	0.0035	44.8	10.2	6.0	1.5	0	29.2	H	S

(13h 34m)

I 5731

(13h 34m)



CLUSTERS WITH IPC: A1767

FIELD CENTER:  $13^{\text{h}}34^{\text{m}}12.0^{\text{s}}$   $59^{\circ}28'59''$  (B1950)  
 $13^{\text{h}}36^{\text{m}}00.3^{\text{s}}$   $59^{\circ}13'42''$  (J2000)  
 $l: 112.48$   $b: 56.99$

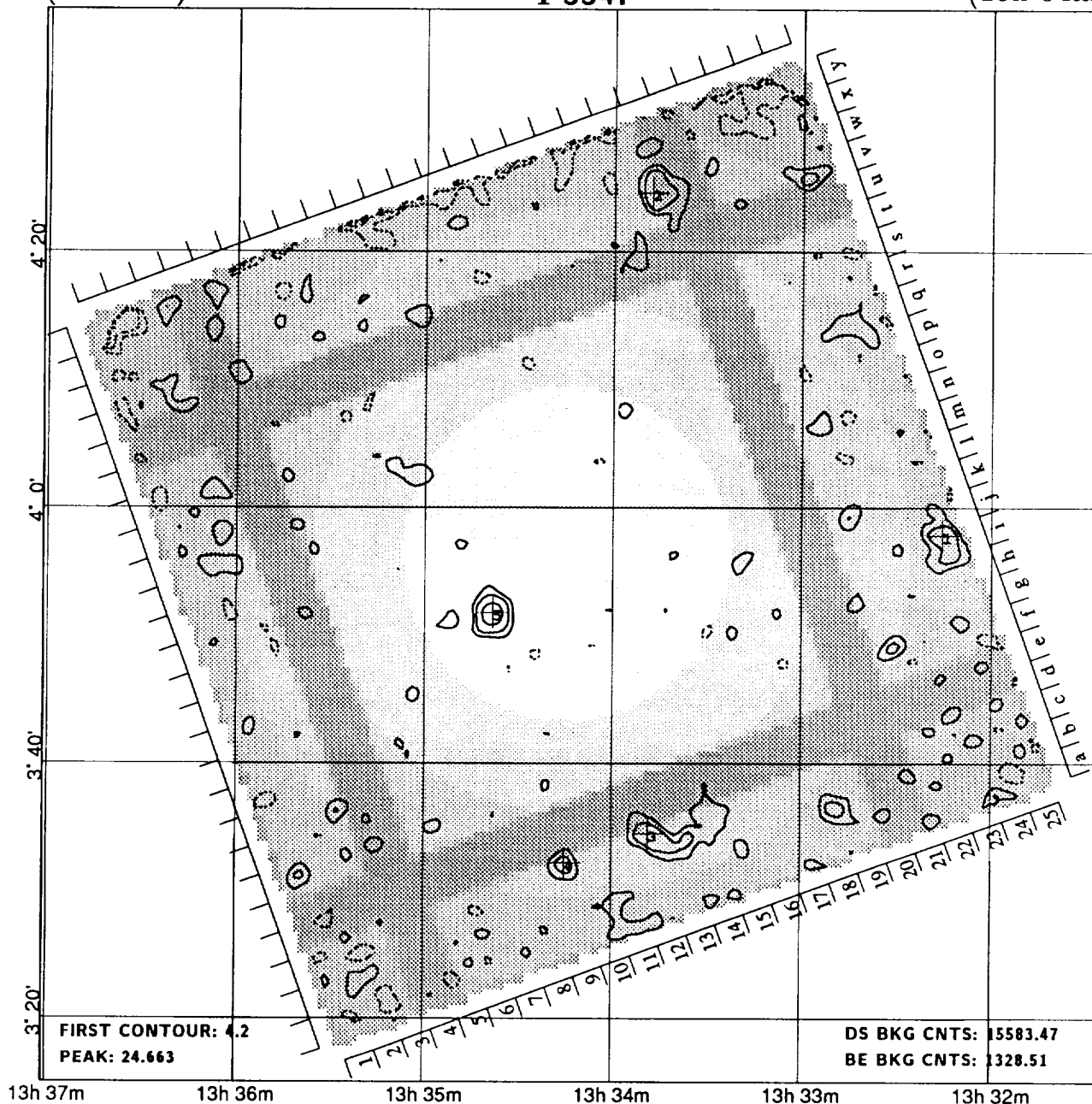
DATE: 1979/316 - 1979/317  
 LIVETIME: 4091.9s  
 ROLL ANGLE:  $-156.7^{\circ}$

NH:  $1.7\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: LS

(13h 34m)

I 5547

(13h 34m)



FIELD CENTER:  $13^{\text{h}}34^{\text{m}}13.0^{\text{s}}$   $03^{\circ}56'59''$  (B1950)  
 $13^{\text{h}}36^{\text{m}}44.9^{\text{s}}$   $03^{\circ}41'43''$  (J2000)  
 $l: 329.69$   $b: 64.19$

DATE: 1980/ 19 - 1980/ 21  
 LIVETIME: 12627.9s  
 ROLL ANGLE:  $-109.9^{\circ}$

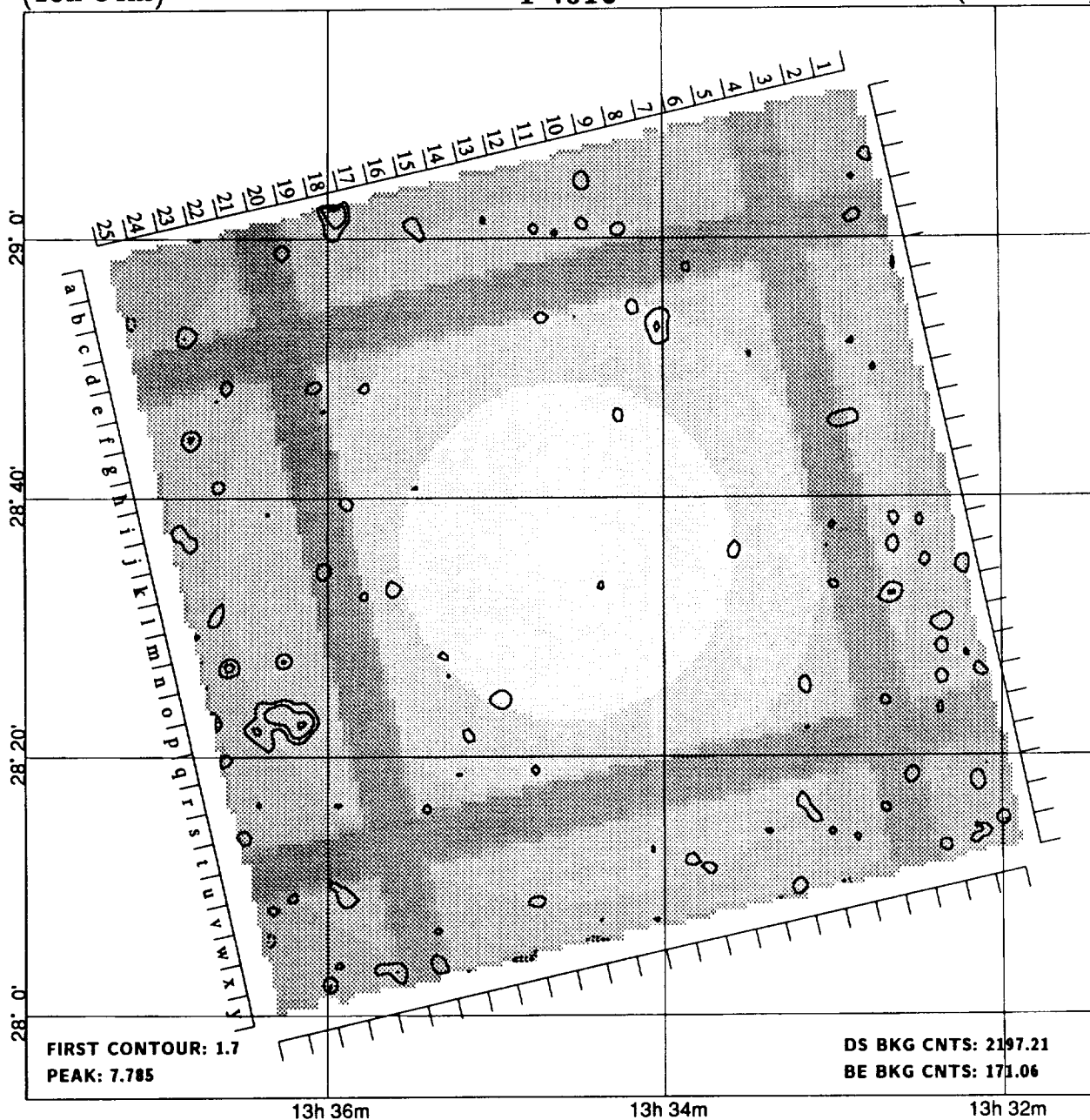
NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3096	1	13 32 15.5	03 57 51	56	0.0057	0.0016	25.5	26.5	3.5	1.3	200	29.5	H	
3109	2	13 33 47.9	04 24 35	59	*0.0076	0.0016	35.2	22.8	4.6	1.5	804	27.6	H	
3110	3	13 33 48.3	03 34 29	53	*0.0069	0.0014	40.7	25.3	5.0	2.0	704	23.4	H	
3113	4	13 34 15.1	03 32 08	56	*0.0045	0.0013	25.3	25.7	3.5	0.6	805	24.7	H	
3115	5	13 34 38.2	03 51 45	38	0.0121	0.0014	105.8	42.2	8.7	1.0	0	8.1	H	

(13h 34m)

I 4016

(13h 34m)



FIELD CENTER:  $13^{\text{h}}34^{\text{m}}36.1^{\text{s}}$   $28^{\circ}35'41''$  (B1950)  
 $13^{\text{h}}36^{\text{m}}55.1^{\text{s}}$   $28^{\circ}20'25''$  (J2000)  
 $l: 42.43$   $b: 79.87$

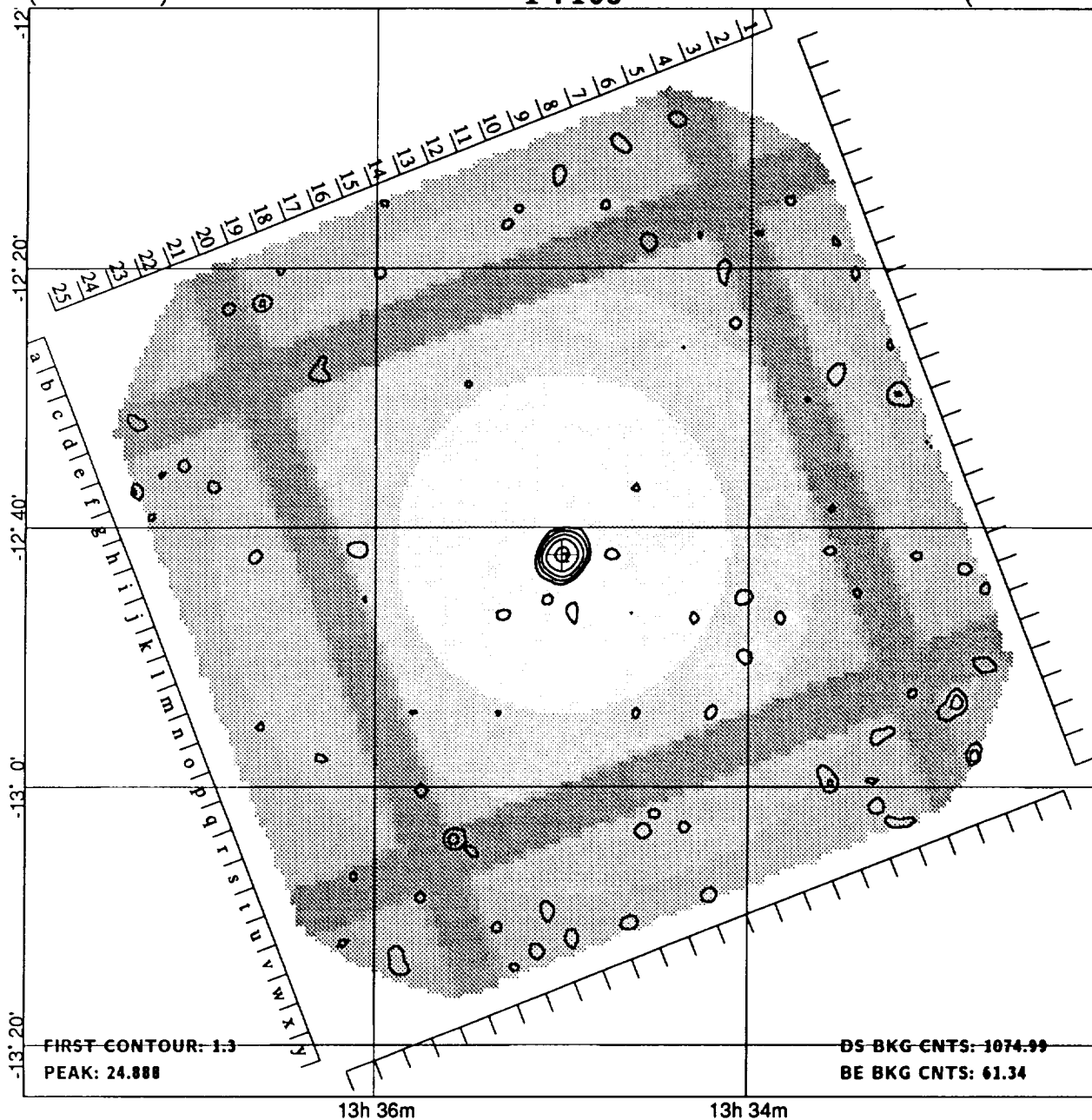
DATE: 1979/201 - 1979/201  
 LIVETIME: 1780.5s  
 ROLL ANGLE:  $77.3^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 34m)

I 7168

(13h 34m)



## DW 1335-12, BURSTING RADIO SOURCE

FIELD CENTER:  $13^{\text{h}}34^{\text{m}}59.9^{\text{s}}$   $-12^{\circ}41'59''$  (B1950)  
 $13^{\text{h}}37^{\text{m}}39.8^{\text{s}}$   $-12^{\circ}57'14''$  (J2000)  
 $l: 320.03$   $b: 48.38$

DATE: 1980/196 - 1980/196  
 LIVETIME: 871.1s  
 ROLL ANGLE:  $68.7^{\circ}$

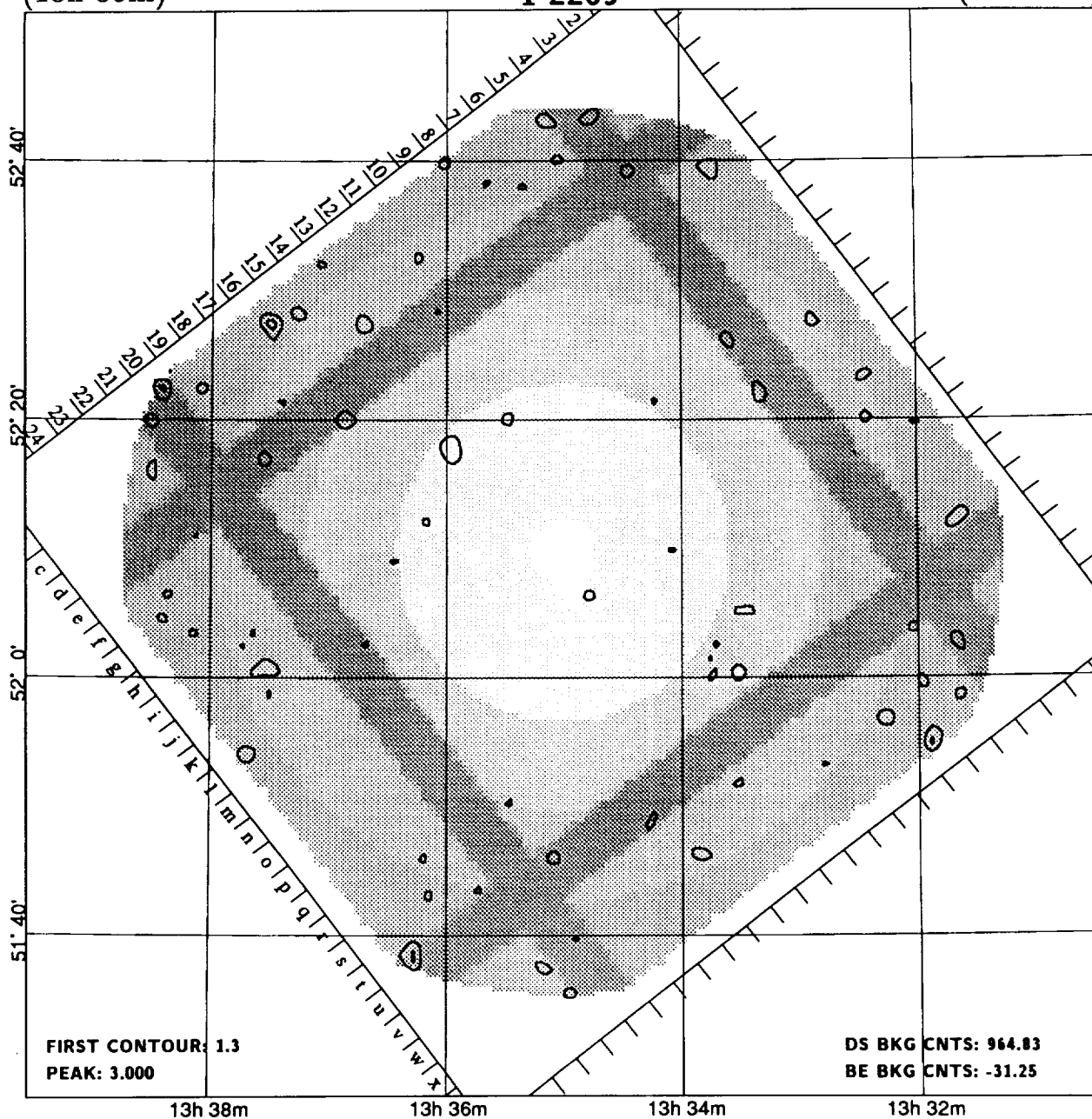
NH:  $4.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3116	1	13 35 00.1	-12 42 09	31	0.164	0.016	106.2	2.8	10.2	1.1	0	0.2	H	

(13h 35m)

I 2269

(13h 35m)



## STELLAR SURVEY-CATAclysmic VARIABLES: UX UMA

FIELD CENTER:  $13^{\text{h}}35^{\text{m}}00.0^{\text{s}}$   $52^{\circ}09'39''$  (B1950)  
 $13^{\text{h}}36^{\text{m}}58.9^{\text{s}}$   $51^{\circ}54'24''$  (J2000)  
 $l: 106.93$   $b: 63.78$

DATE: 1979/166 - 1979/166  
 LIVETIME: 781.8s  
 ROLL ANGLE:  $52.5^{\circ}$

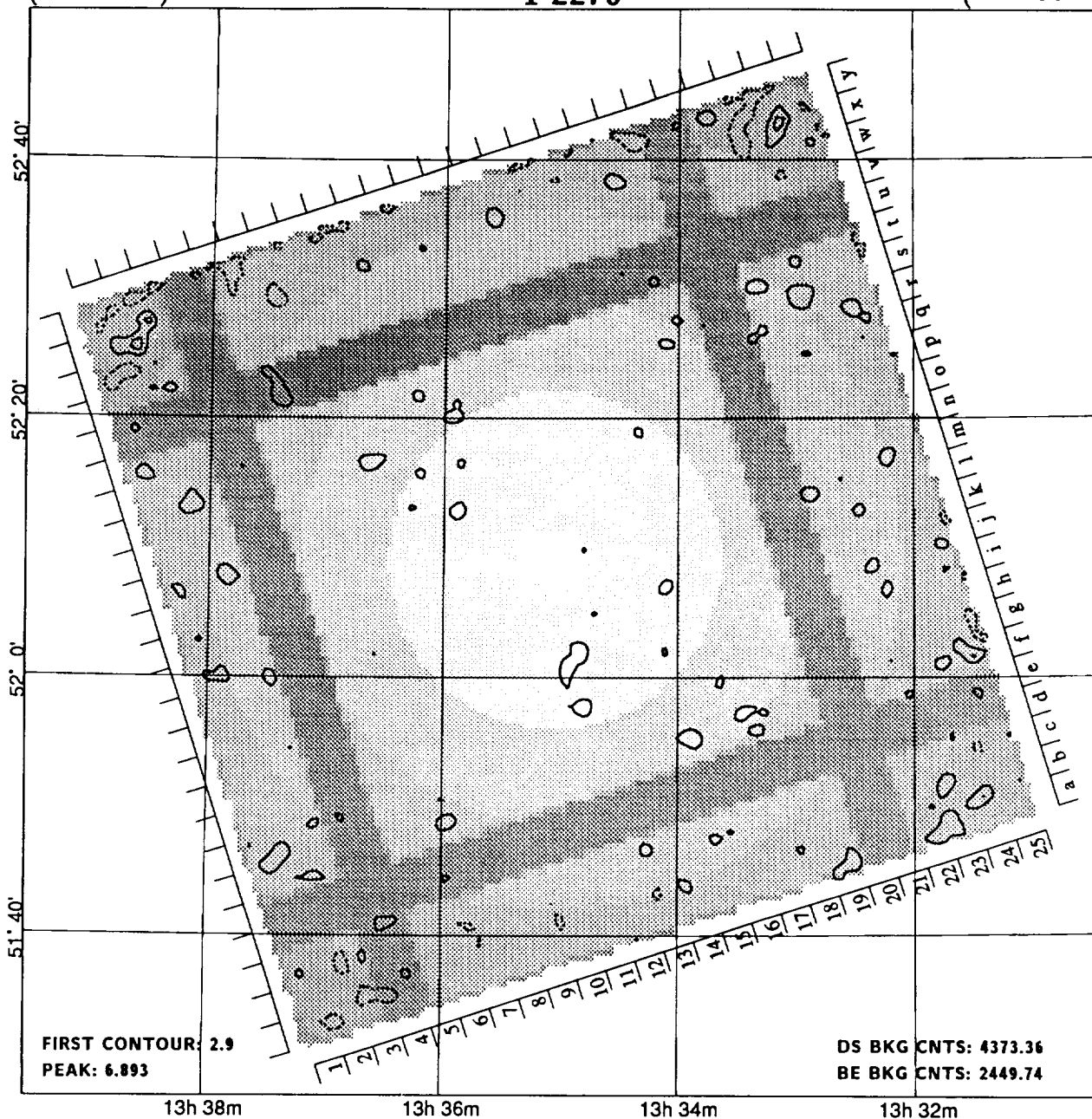
NH:  $1.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C



(13h 35m)

I 2270

(13h 35m)



## STELLAR SURVEY-CATAclysmic VARIABLES: UX UMA

FIELD CENTER:  $13^h 35^m 00.0^s$   $52^\circ 09' 39''$  (B1950)  
 $13^h 36^m 58.9^s$   $51^\circ 54' 24''$  (J2000)  
 $l: 106.93$   $b: 63.78$

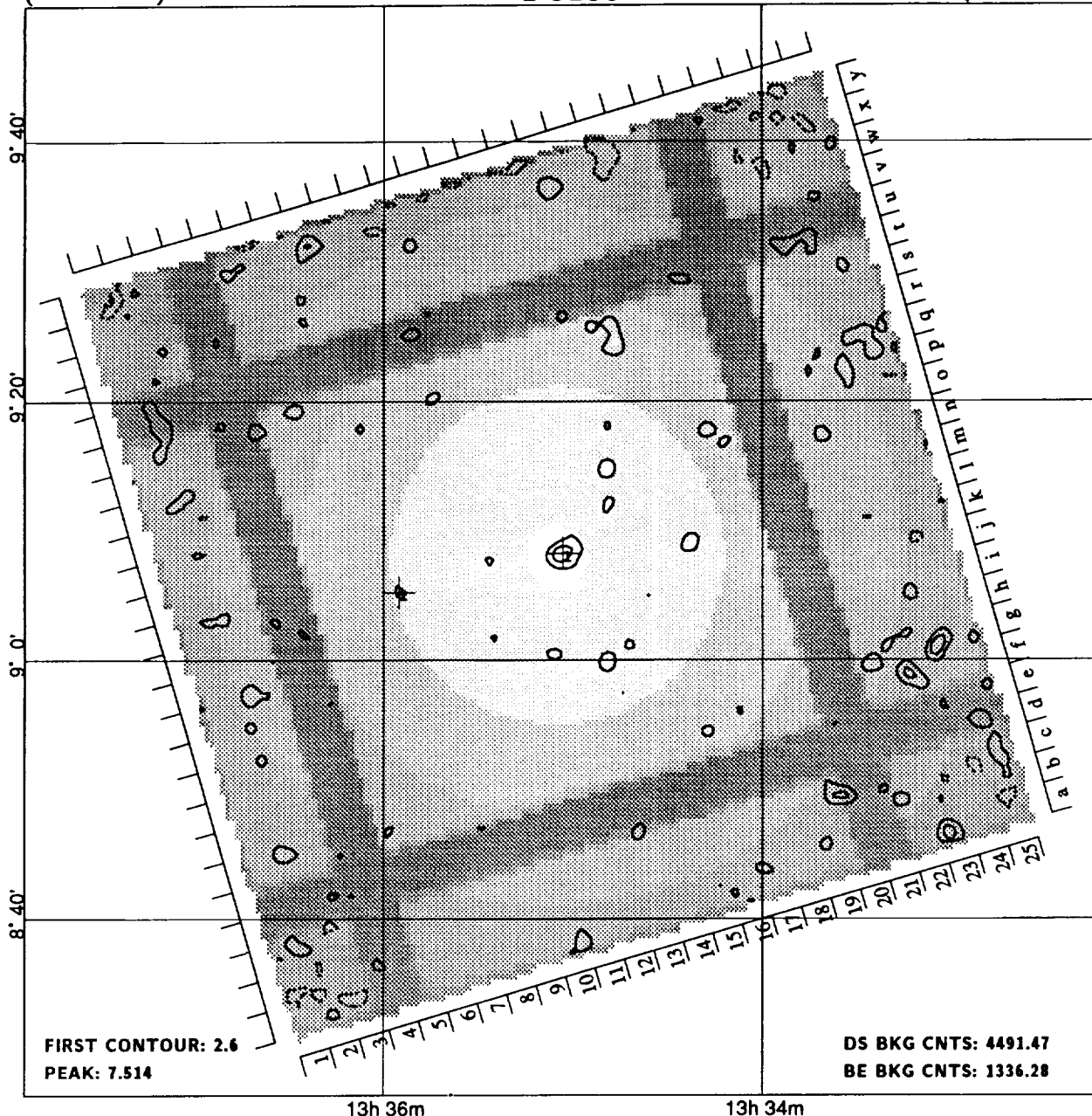
DATE: 1980/ 8 - 1980/ 8  
 LIVETIME: 3543.9s  
 ROLL ANGLE:  $-107.9^\circ$

NH:  $1.0E+20$   
 REF/ID:  
 FIELD FLAGS: C

(13h 35m)

I 9136

(13h 35m)



CAREFULLY SELECTED Sbc GALAXIES: NGC 5248

FIELD CENTER:  $13^{\text{h}}35^{\text{m}}03.0^{\text{s}}$   $09^{\circ}08'29''$  (B1950)

DATE: 1981/ 28 - 1981/ 28

NH:  $2.1\text{E}+20$  $13^{\text{h}}37^{\text{m}}32.4^{\text{s}}$   $08^{\circ}53'14''$  (J2000)

LIVETIME: 3639.6s

REF/ID:

 $l$ : 335.94  $b$ : 68.75ROLL ANGLE:  $-106.2^{\circ}$ 

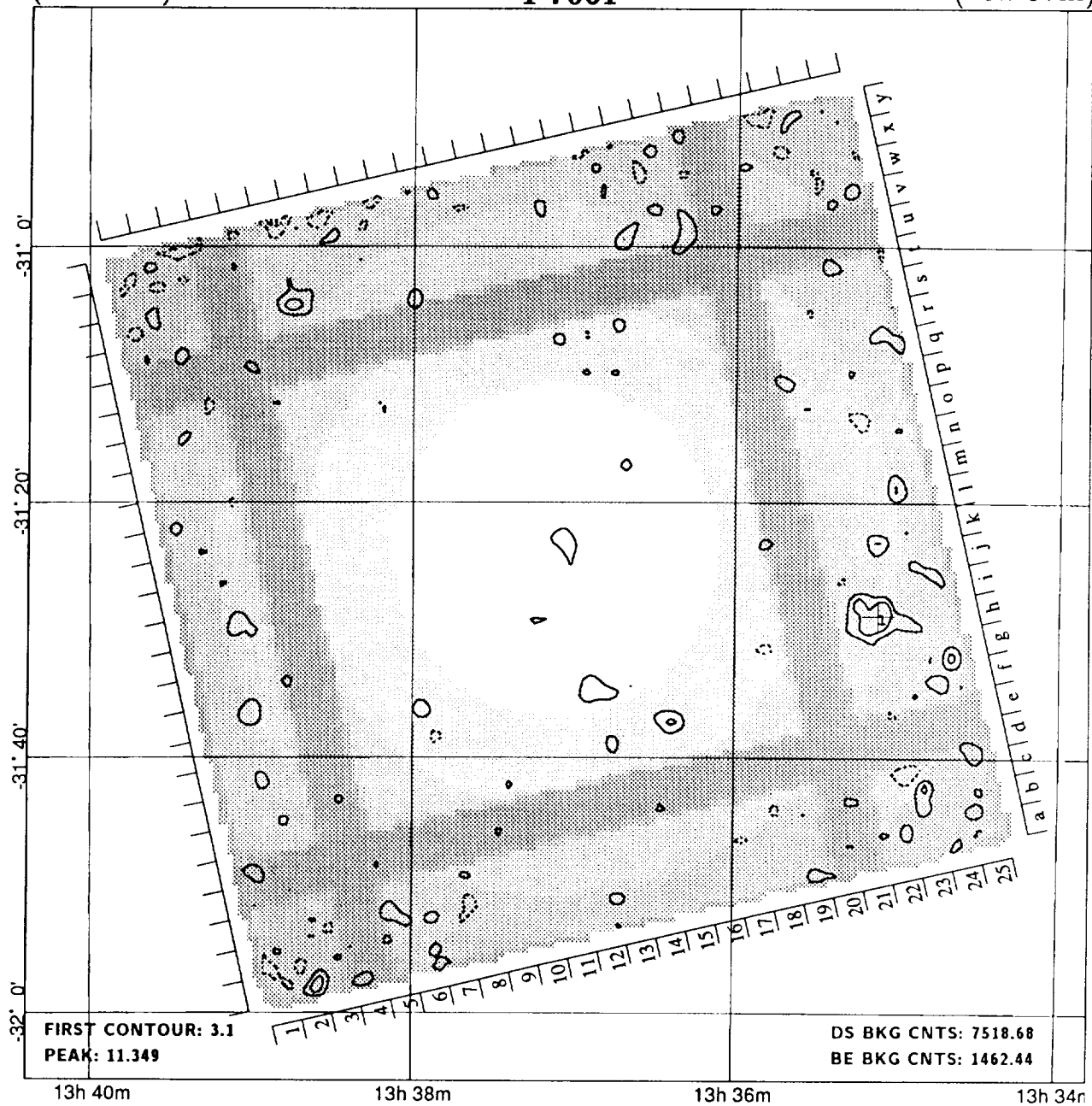
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3117	1L	13 35 03.2	09 08 19	36	0.0109	0.0029	29.4	13.6	3.6	0.8	0	0.4		
3122	2L	13 35 55.2	09 05 20	55	0.0086	0.0023	19.7	1.3	3.7	0.3	0	13.3		

(13h 37m)

I 7061

(13h 37m)



## NGC 5253, LATE GALAXY SURVEY

FIELD CENTER:  $13^{\text{h}}37^{\text{m}}06.0^{\text{s}}$   $-31^{\circ}23'23''$  (B1950) $13^{\text{h}}39^{\text{m}}56.8^{\text{s}}$   $-31^{\circ}38'34''$  (J2000) $l: 314.86$   $b: 30.10$ 

DATE: 1980/363 - 1980/363

LIVETIME: 6092.7s

ROLL ANGLE:  $-102.9^{\circ}$ NH:  $4.0\text{E}+20$ 

REF/ID: !

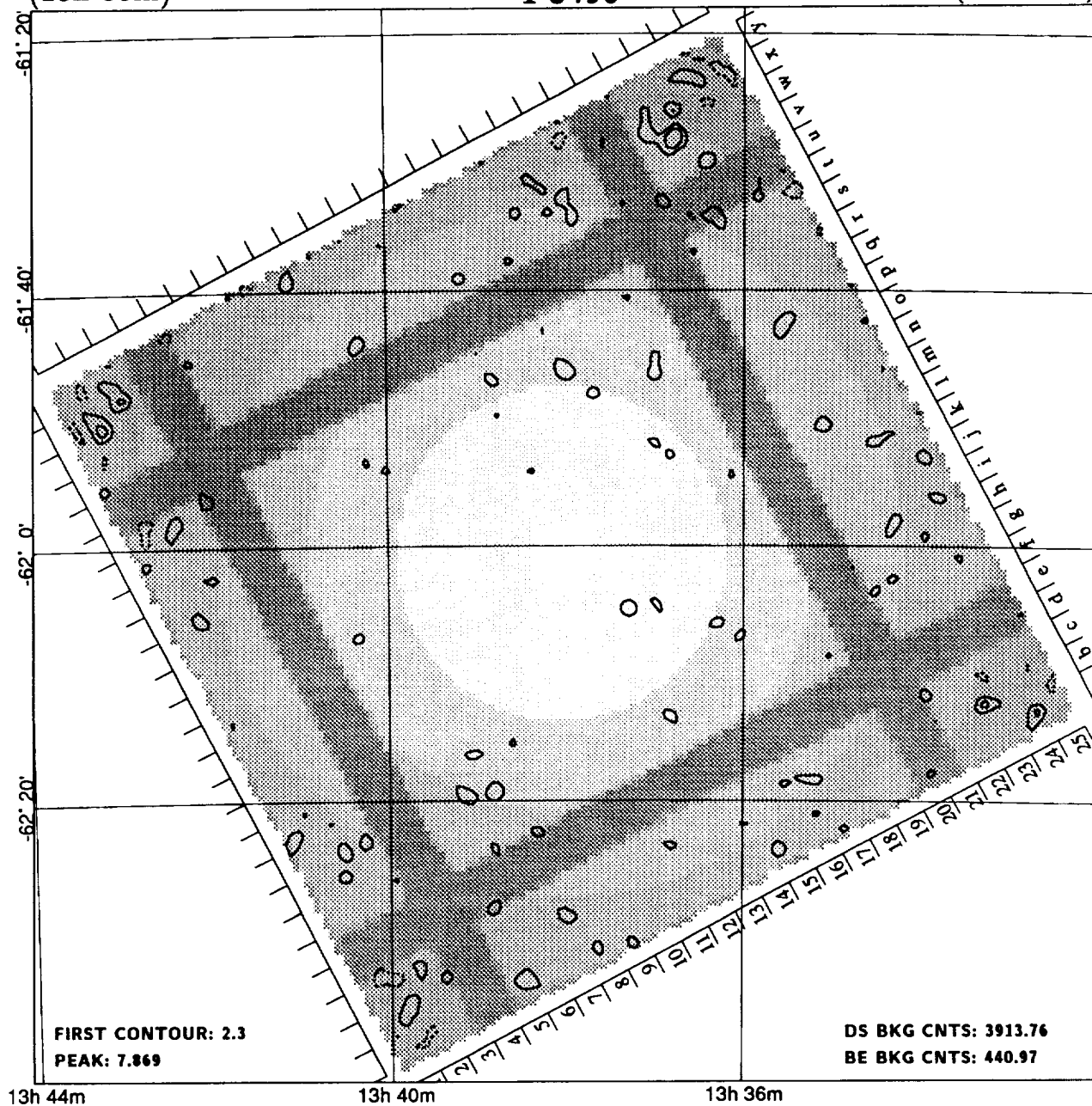
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3118	1	13 35 06.9	-31 28 56	55	0.0110	0.0025	27.7	13.3	4.3	1.4	0	25.5	H

(13h 38m)

I 3496

(13h 38m)

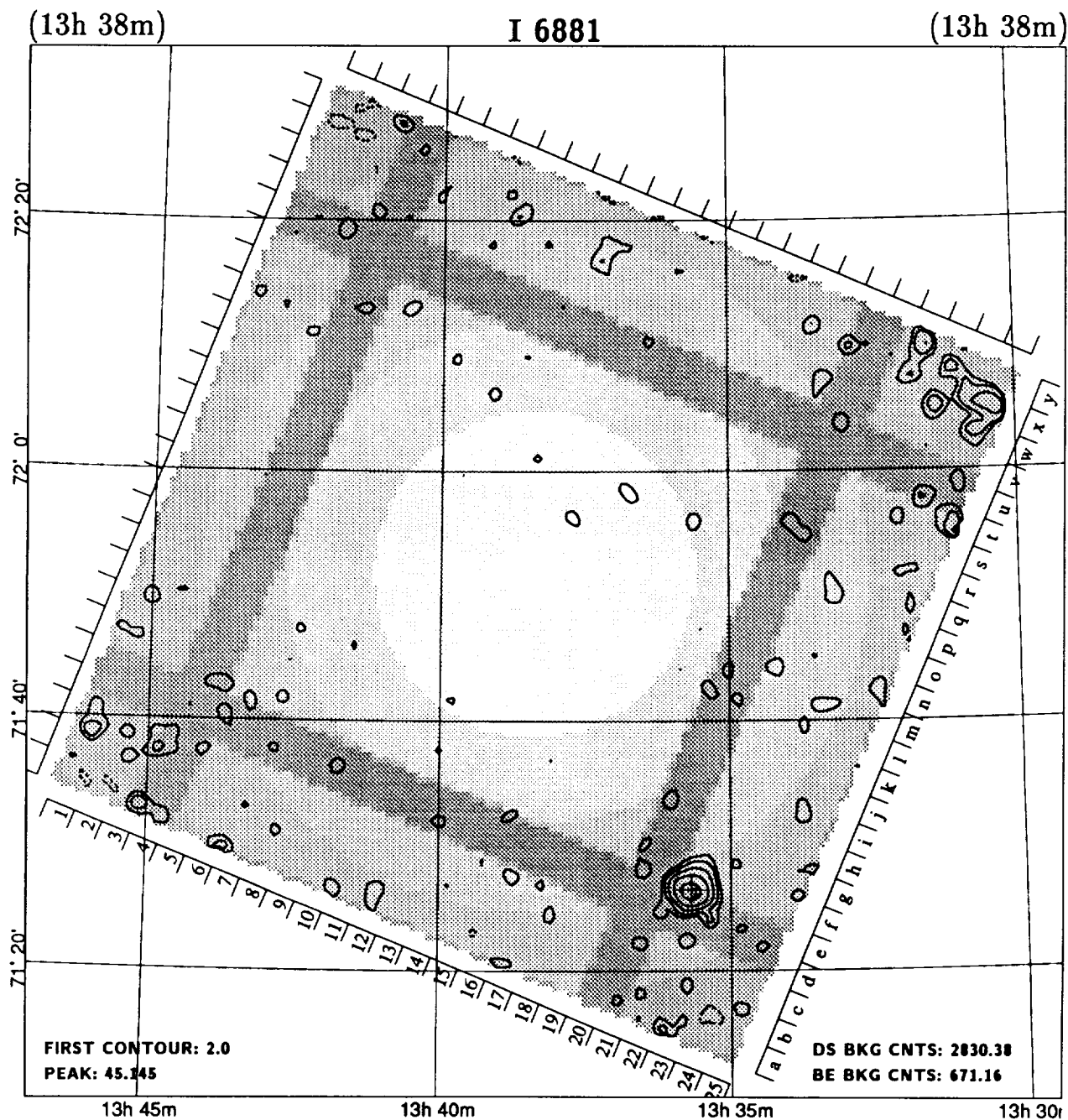


G308.7+0.0, CRAB-LIKE SNR

FIELD CENTER:  $13^h 38^m 00.0^s$   $-61^\circ 59' 59''$  (B1950)  
 $13^h 41^m 27.0^s$   $-62^\circ 15' 08''$  (J2000)  
 $l: 308.72$   $b: 0.06$

DATE: 1979/ 35 - 1979/ 35  
 LIVETIME: 3171.4s  
 ROLL ANGLE:  $-117.7^\circ$

NH:  $1.7E+21$   
 REF/ID: SNR  
 FIELD FLAGS:



A1777, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER: 13<sup>h</sup>38<sup>m</sup>12.0<sup>s</sup> 71°51'59" (B1950)  
 13<sup>h</sup>39<sup>m</sup>21.1<sup>s</sup> 71°36'49" (J2000)  
 $\ell$ : 117.62  $b$ : 45.02

DATE: 1981/ 39 - 1981/ 40  
 LIVETIME: 2293.5s  
 ROLL ANGLE: -67.7°

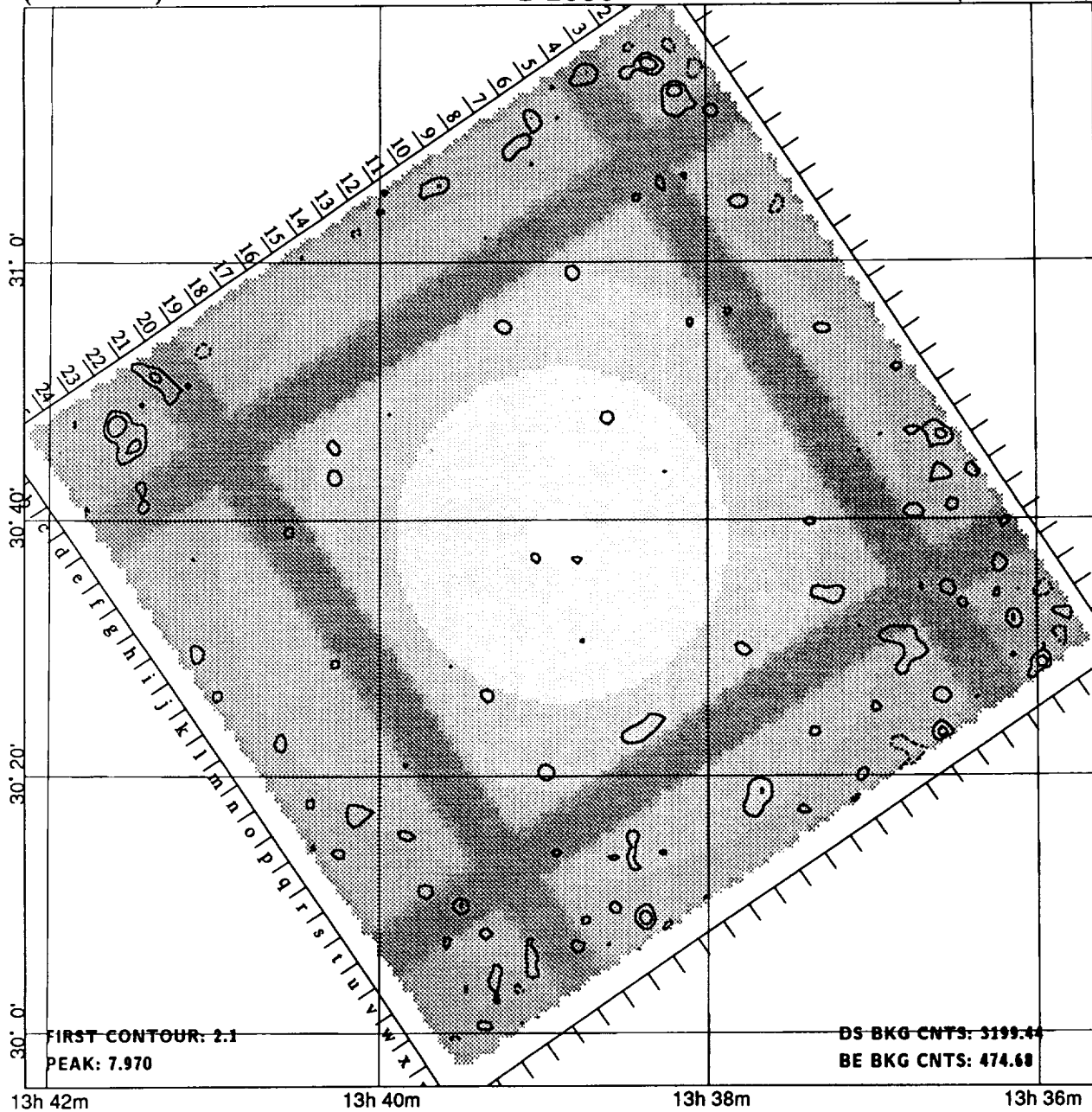
NH: 1.5E+20  
 REF/ID: CLG  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3120	1	13 35 40.3	71 26 30	48	*0.106	0.011	92.0	3.0	9.4	1.2	1106	28.0	H	

(13h 38m)

I 2656

(13h 38m)



## SEYFERT GALAXY SURVEY: MKN 268

FIELD CENTER:  $13^{\text{h}}38^{\text{m}}54.0^{\text{s}}$   $30^{\circ}37'59''$  (B1950)  
 $13^{\text{h}}41^{\text{m}}11.1^{\text{s}}$   $30^{\circ}22'51''$  (J2000)  
 $l: 52.48$   $b: 78.63$

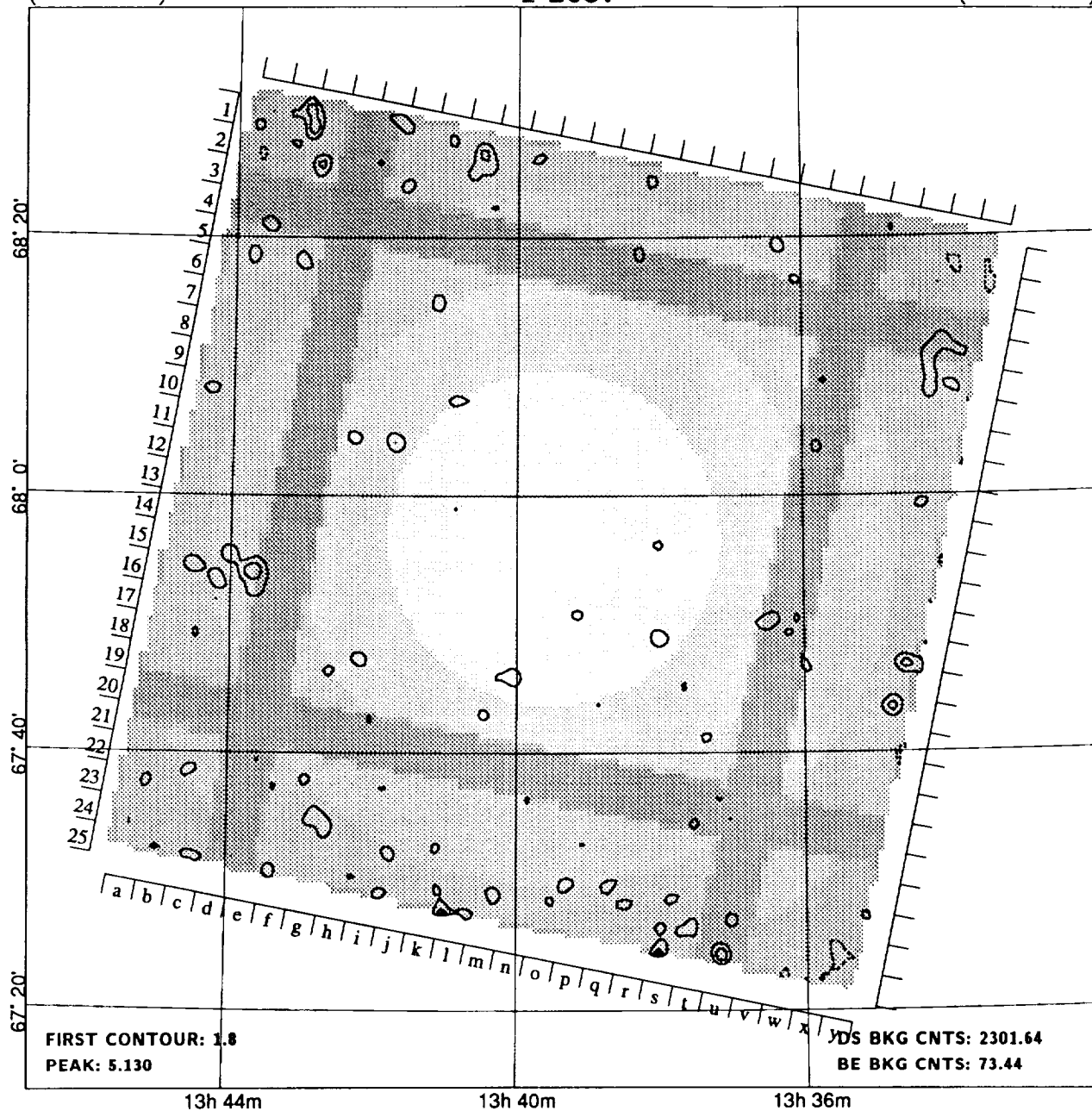
DATE: 1980/186 - 1980/186  
 LIVETIME: 2592.6s  
 ROLL ANGLE:  $55.9^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 39m)

I 2657

(13h 39m)



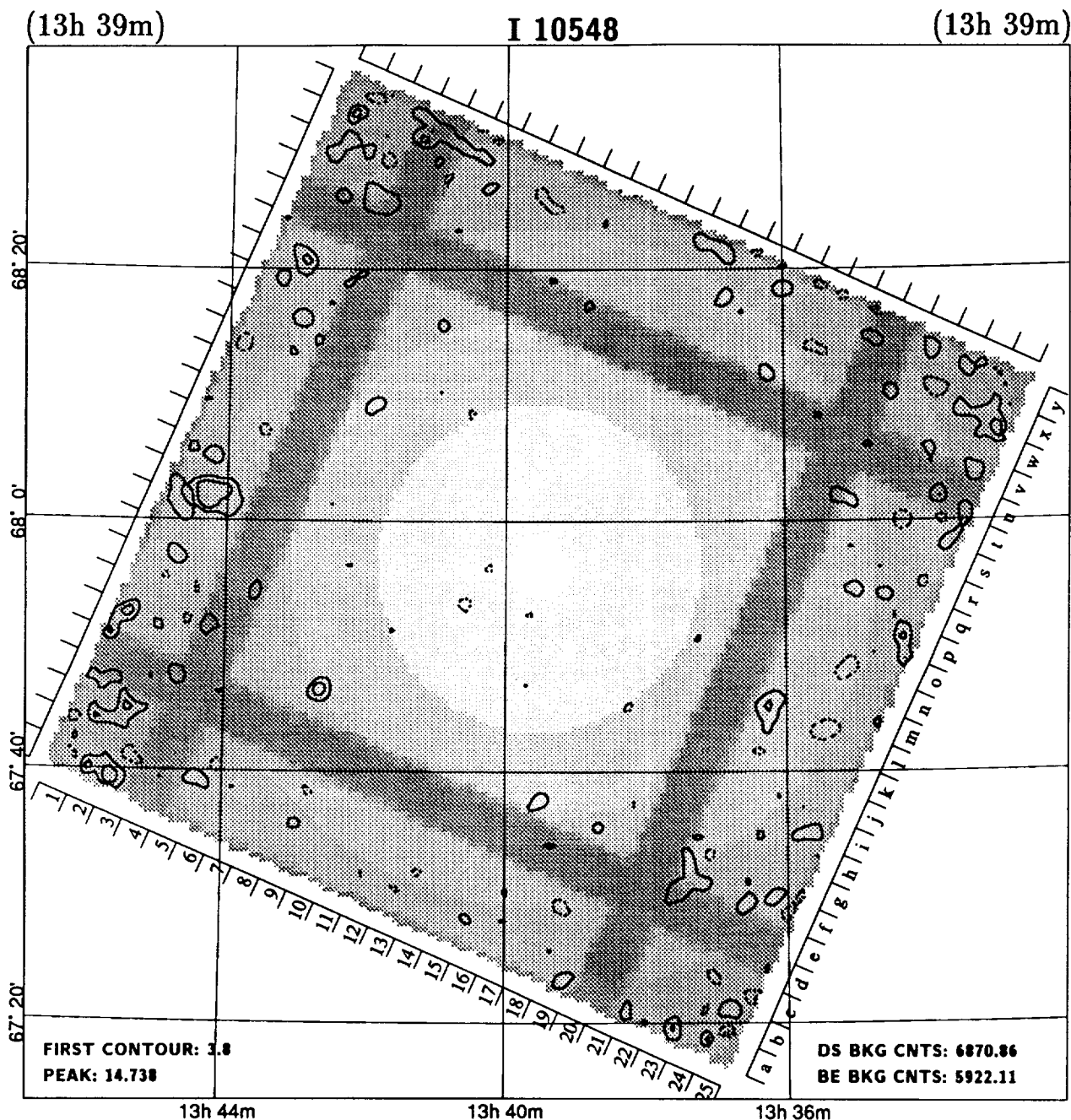
## SEYFERT GALAXY SURVEY: MKN 270:

FIELD CENTER:  $13^h 39^m 24.0^s$   $67^\circ 55' 59''$  (B1950)  
 $13^h 40^m 48.4^s$   $67^\circ 40' 51''$  (J2000)  
 $l: 115.86$   $b: 48.76$

DATE: 1979/119 - 1979/119  
 LIVETIME: 1865.1s  
 ROLL ANGLE:  $11.1^\circ$

NH:  $1.8E+20$   
 REF/ID:  
 FIELD FLAGS: C





**MKN 270 SEYFERT FOLLOWUP**

FIELD CENTER:  $13^{\text{h}}39^{\text{m}}24.0^{\text{s}}$   $67^{\circ}55'59''$  (B1950)  
 $13^{\text{h}}40^{\text{m}}48.4^{\text{s}}$   $67^{\circ}40'51''$  (J2000)  
 $\ell$ : 115.86  $b$ : 48.76

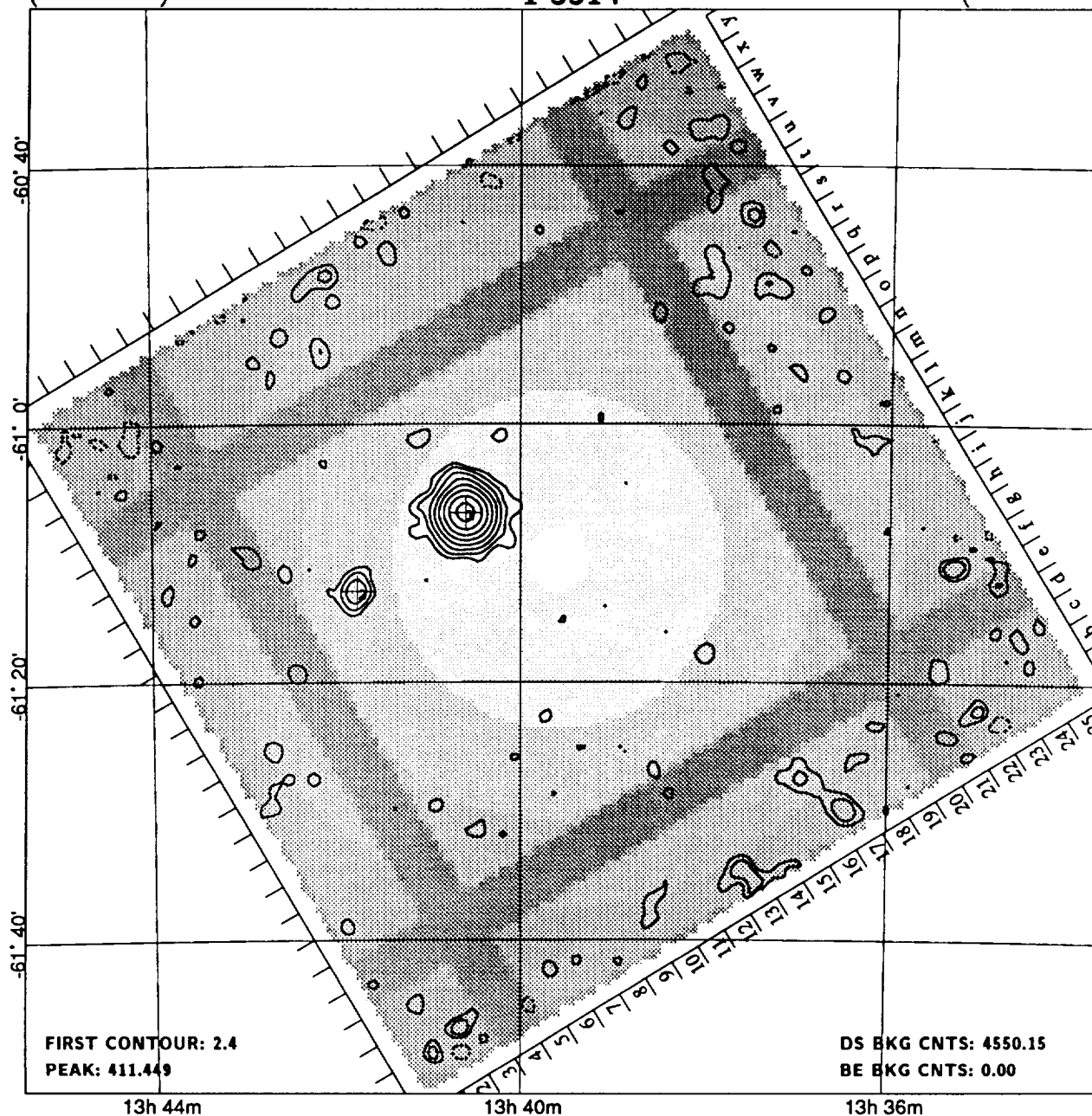
DATE: 1981/ 42 - 1981/ 43  
 LIVETIME: 5567.7s  
 ROLL ANGLE:  $-66.2^{\circ}$

NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: CL

(13h 39m)

I 5314

(13h 39m)



## SEARCH FOR YOUNG GALACTIC SNR

FIELD CENTER:  $13^{\text{h}}39^{\text{m}}33.1^{\text{s}}$   $-61^{\circ}09'57''$  (B1950)  
 $13^{\text{h}}42^{\text{m}}59.0^{\text{s}}$   $-61^{\circ}25'03''$  (J2000)  
 $l$ : 309.06  $b$ : 0.84

DATE: 1980/ 40 - 1980/ 40  
 LIVETIME: 3687.1s  
 ROLL ANGLE:  $-121.1^{\circ}$

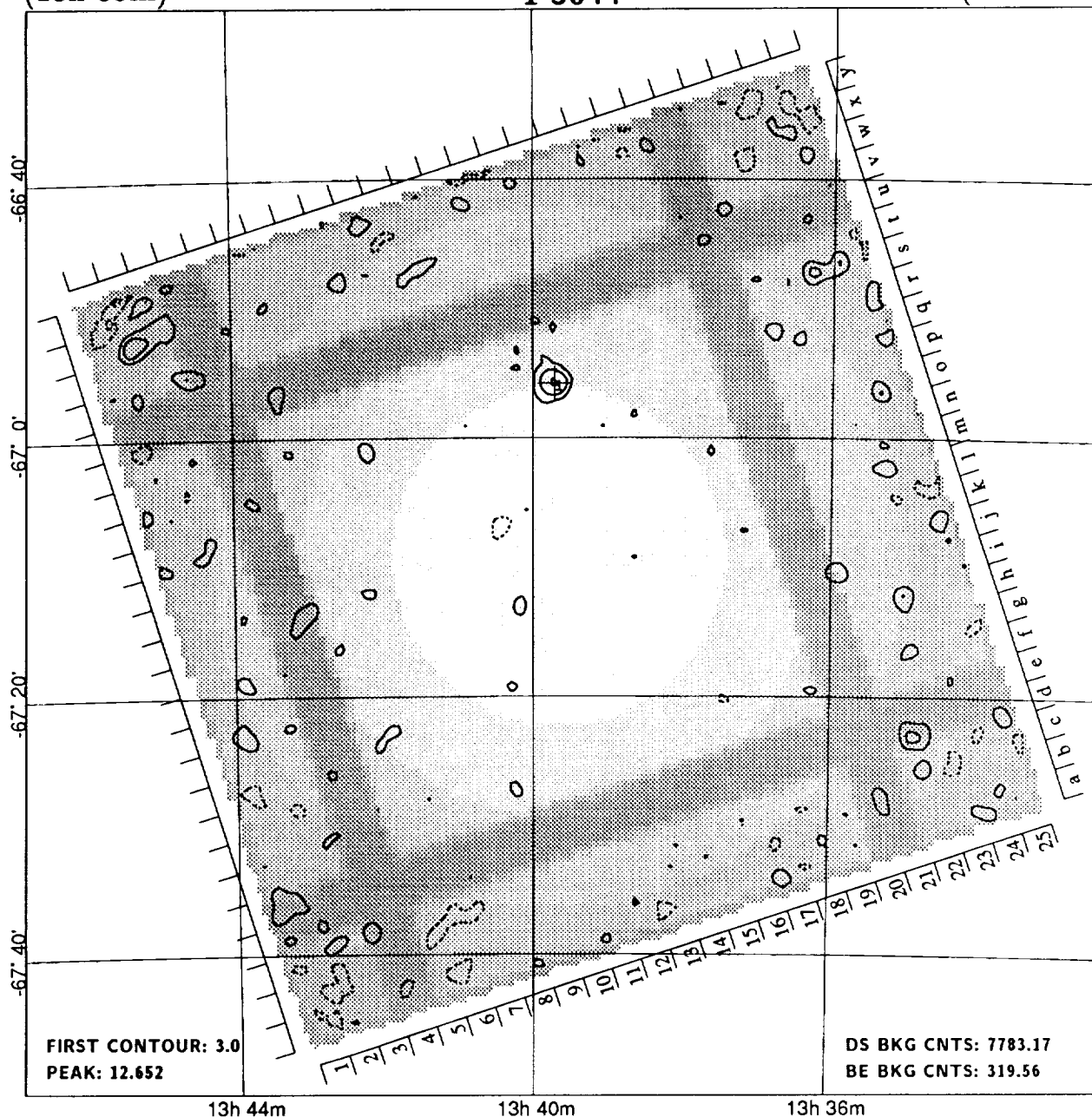
NH:  $1.7\text{E}+21$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3127	1L	13 40 35.7	-61 06 52	37	0.551	0.018	1390.5	167.5	31.0	1.3	0	8.2	a	
3131	2L	13 41 46.8	-61 12 59	50	0.0179	0.0039	38.1	12.9	4.4	0.9	0	16.4		

(13h 39m)

I 5044

(13h 39m)



HD 119078, WR STARS W/ OVI EMISSION

FIELD CENTER:  $13^h 39^m 34.0^s$   $-67^\circ 08' 56''$  (B1950)  
 $13^h 43^m 16.1^s$   $-67^\circ 24' 02''$  (J2000)  
 $l: 307.89$   $b: -5.03$

DATE: 1980/ 24 - 1980/ 24  
 LIVETIME: 6307.0s  
 ROLL ANGLE:  $-108.0^\circ$

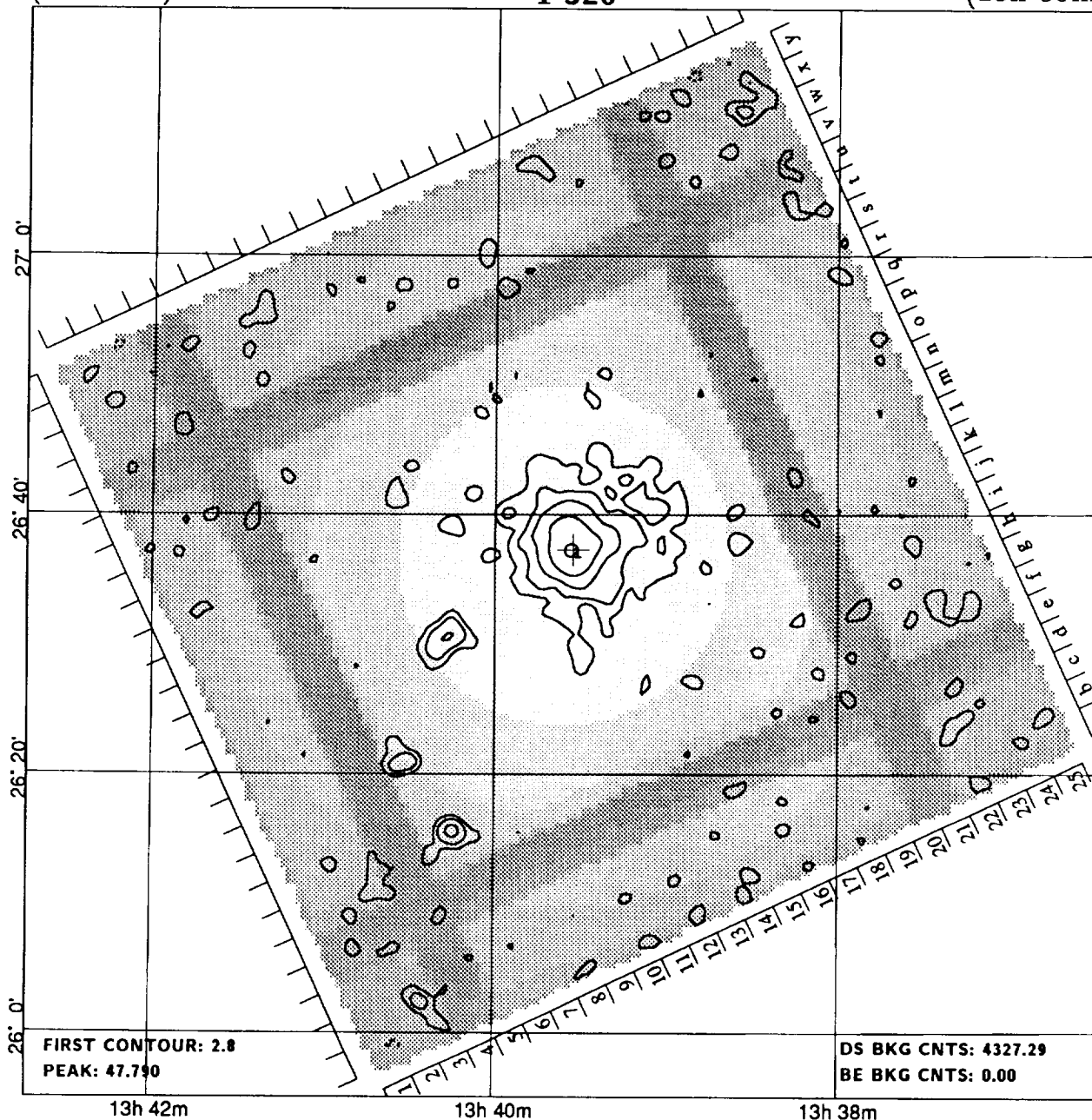
NH:  $1.6E+21$   
 REF/ID: S  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3125	1	13 39 42.4	-66 55 48	41	0.0087	0.0018	33.8	16.2	4.8	0.9	0	13.2	H	

(13h 39m)

I 320

(13h 39m)



## A 1775 CLUSTERS WITH TAILED RADIO SOURCES

FIELD CENTER:  $13^{\text{h}}39^{\text{m}}36.0^{\text{s}}$   $26^{\circ}36'59''$  (B1950)  
 $13^{\text{h}}41^{\text{m}}55.6^{\text{s}}$   $26^{\circ}21'53''$  (J2000)  
 $l: 31.92$   $b: 78.71$

DATE: 1978/360 - 1978/360  
 LIVETIME: 3506.5s  
 ROLL ANGLE:  $-115.1^{\circ}$

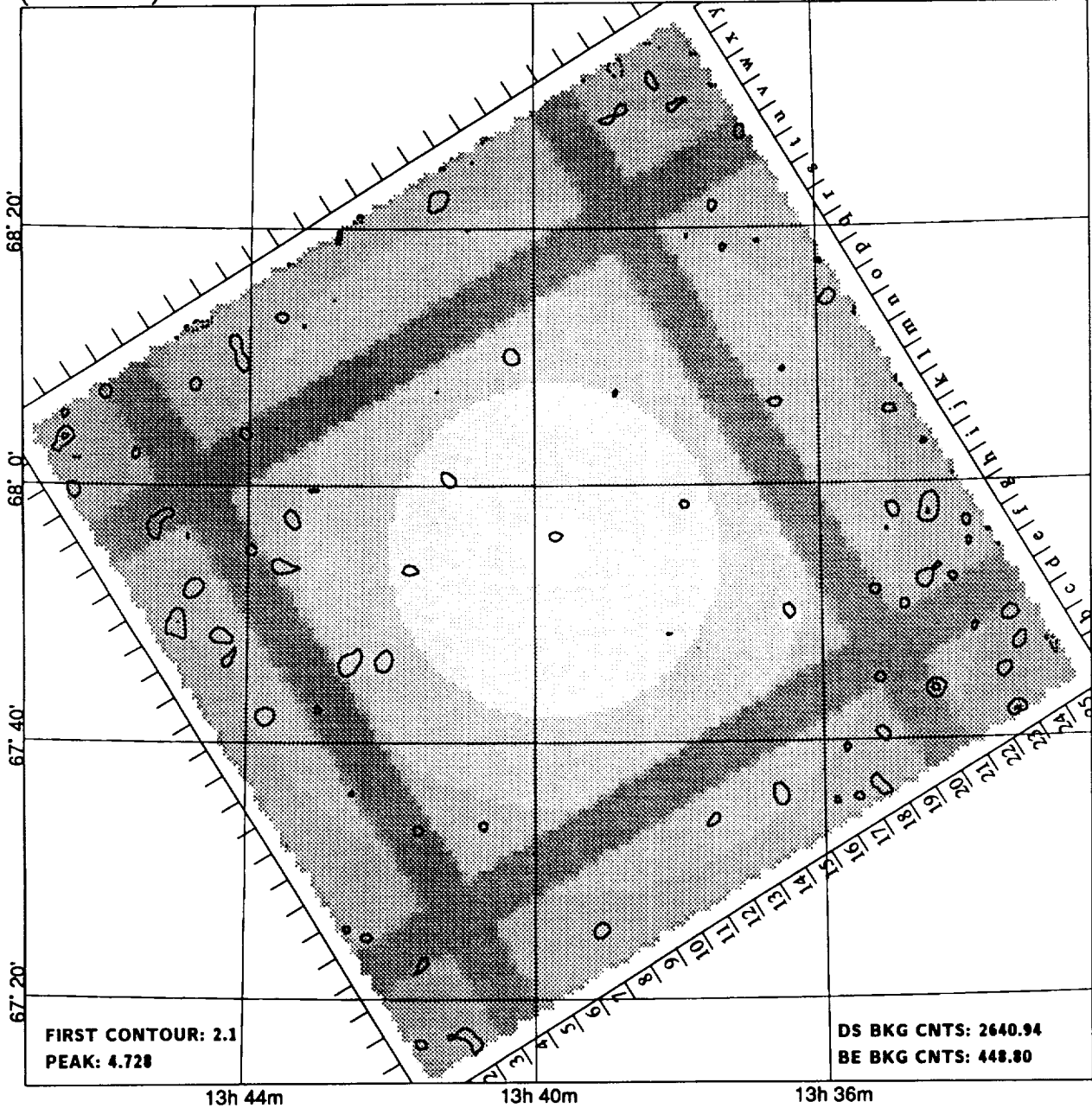
NH:  $1.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3123	1L	13 39 32.5	26 37 19	31	0.0431	0.0077	112.4	144.6	5.5	4.6	0	0.2		CLG

(13h 39m)

I 7203

(13h 39m)

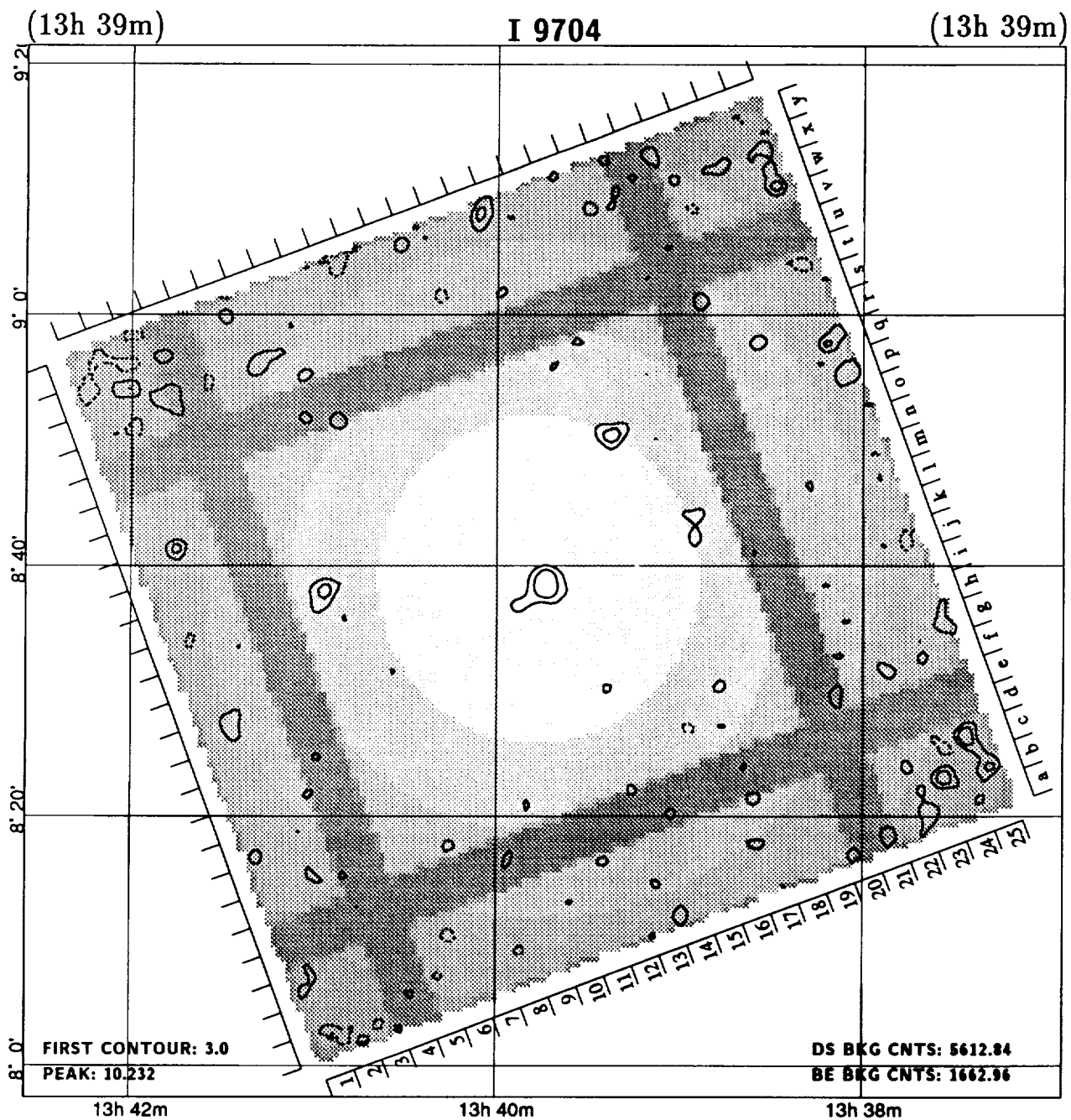


## MKN 270, VARIABILITY OF TYPE 2 SEYFERTS

FIELD CENTER:  $13^{\text{h}}39^{\text{m}}40.7^{\text{s}}$   $67^{\circ}55'32''$  (B1950)  
 $13^{\text{h}}41^{\text{m}}05.0^{\text{s}}$   $67^{\circ}40'25''$  (J2000)  
 $l: 115.82$   $b: 48.76$

DATE: 1980/356 - 1980/356  
 LIVETIME: 2140.0s  
 ROLL ANGLE:  $-121.6^{\circ}$

NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



F0-G5 STARS: HR 5156

FIELD CENTER:  $13^{\text{h}}39^{\text{m}}44.5^{\text{s}}$   $08^{\circ}39'28''$  (B1950)  
 $13^{\text{h}}42^{\text{m}}14.0^{\text{s}}$   $08^{\circ}24'22''$  (J2000)  
 $l: 337.99$   $b: 67.75$

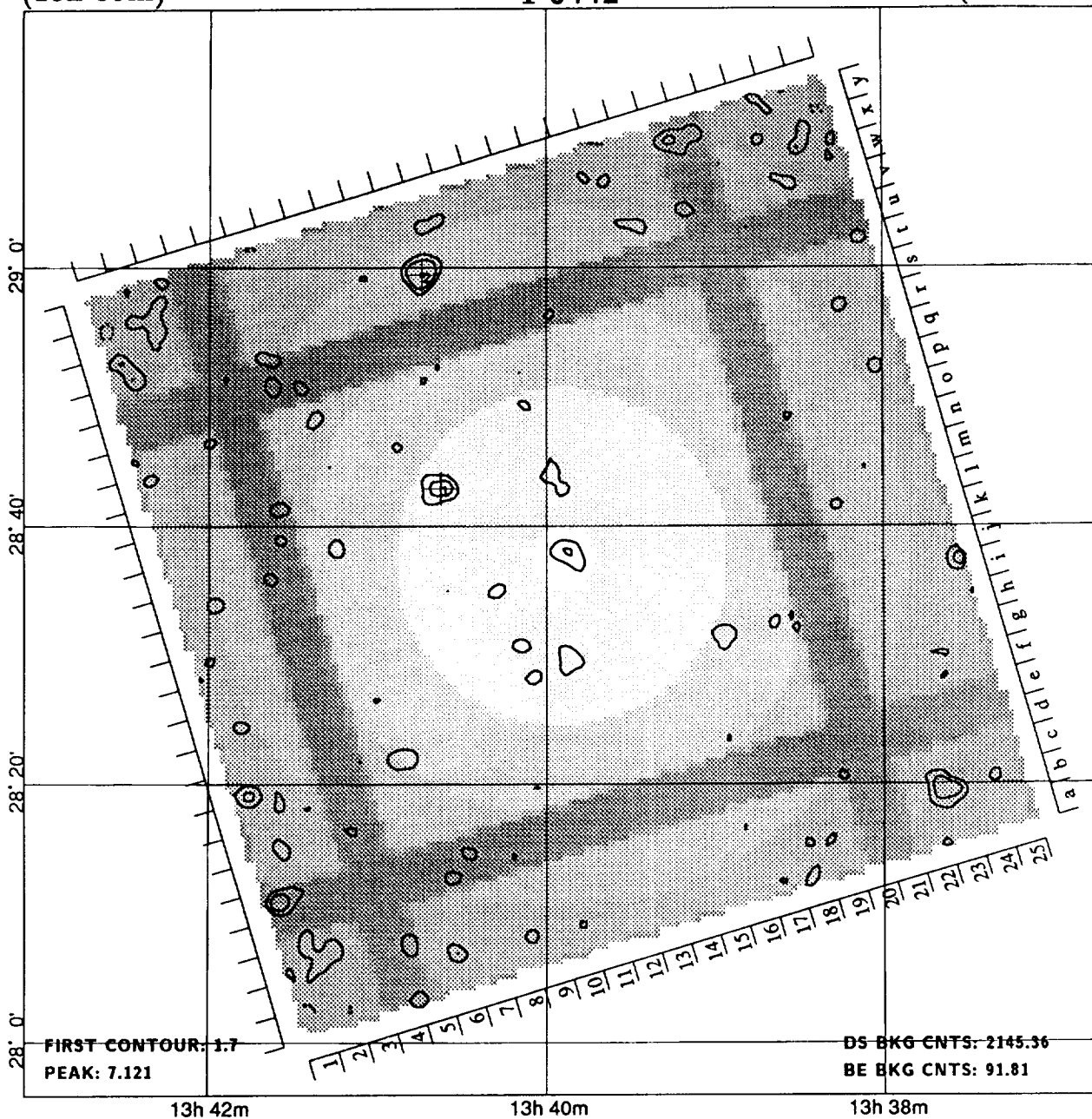
DATE: 1981/ 28 - 1981/ 28  
 LIVETIME: 4548.3s  
 ROLL ANGLE:  $-110.4^{\circ}$

NH:  $2.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(13h 39m)

I 6442

(13h 39m)



## NGC 5272, GLOBULAR CLUSTER SURVEY

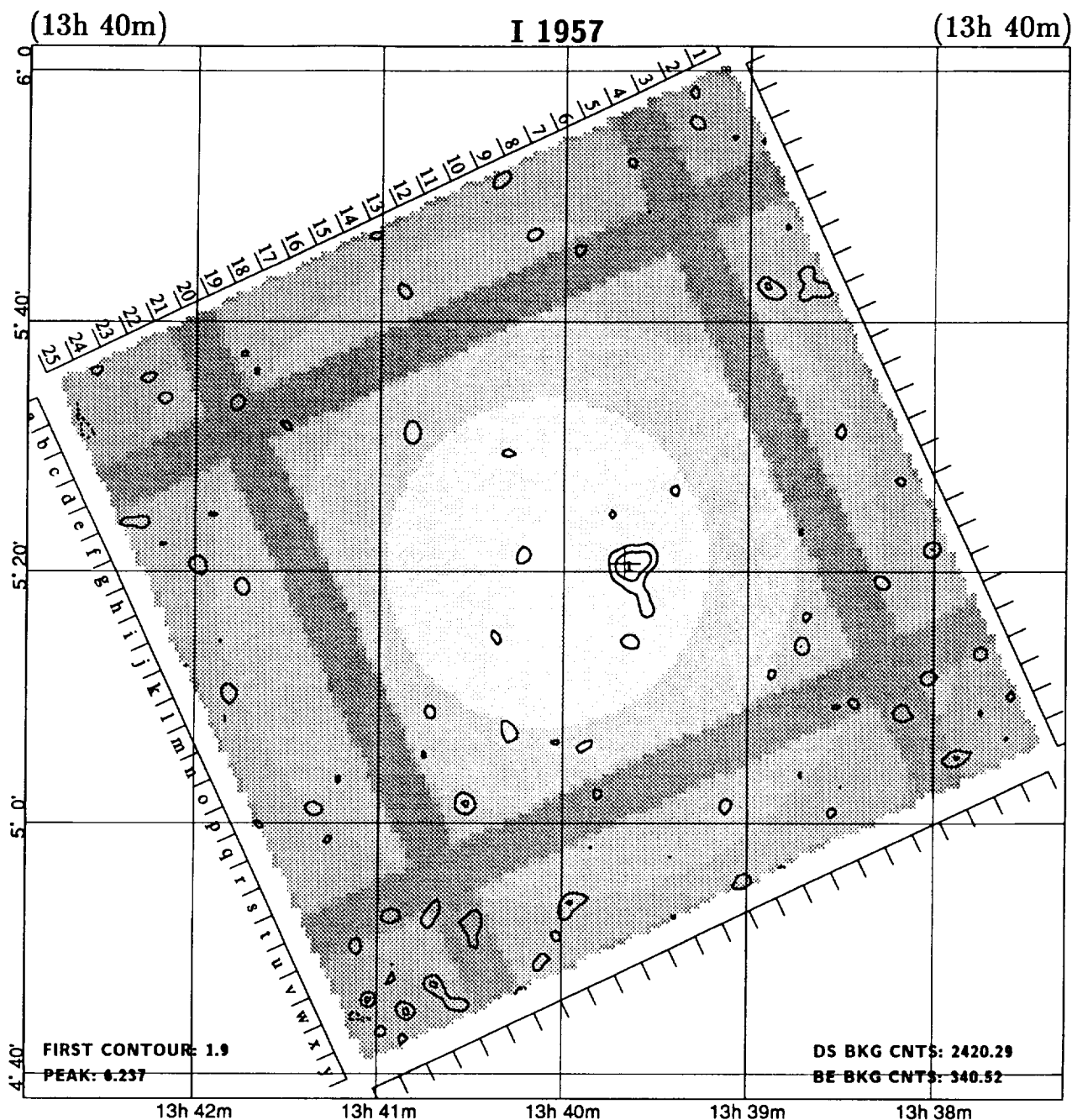
FIELD CENTER:  $13^{\text{h}}39^{\text{m}}54.0^{\text{s}}$   $28^{\circ}37'59''$  (B1950)  
 $13^{\text{h}}42^{\text{m}}12.2^{\text{s}}$   $28^{\circ}22'53''$  (J2000)  
 $l: 42.24$   $b: 78.70$

DATE: 1981/ 17 - 1981/ 17  
 LIVETIME: 1738.5s  
 ROLL ANGLE:  $-106.5^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3128	1	13 40 37.7	28 42 56	46	0.0166	0.0043	18.9	5.1	3.9	0.8	0	11.0	H	
3129	2	13 40 44.5	28 59 27	54	0.0240	0.0062	18.3	3.7	3.9	0.8	0	24.3	H	





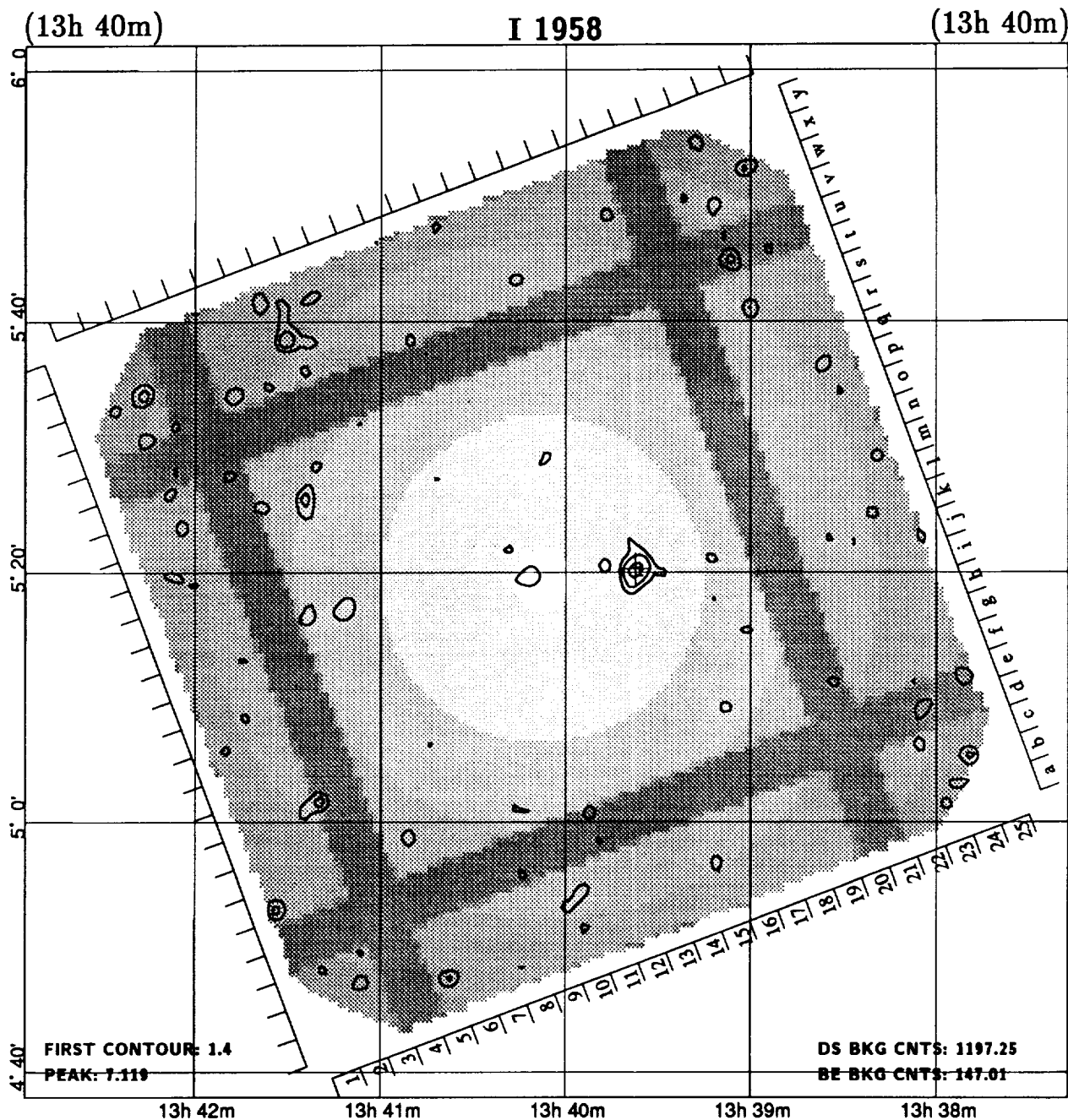
**4C 05.57: SEYFERT AND N-TYPE GALAXIES**

FIELD CENTER:  $13^{\text{h}}40^{\text{m}}06.0^{\text{s}}$   $05^{\circ}19'59''$  (B1950)  
 $13^{\text{h}}42^{\text{m}}37.1^{\text{s}}$   $05^{\circ}04'54''$  (J2000)  
 $l: 334.14$   $b: 64.81$

DATE: 1979/182 - 1979/182  
 LIVETIME: 1961.2s  
 ROLL ANGLE:  $64.9^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3124	1	13 39 40.1	05 20 38	43	0.0161	0.0039	22.2	6.8	4.1	1.4	0	7.1	AH	AGN



4C 05.57: SEYFERT AND N-TYPE GALAXIES

FIELD CENTER:  $13^{\text{h}}40^{\text{m}}06.0^{\text{s}}$   $05^{\circ}19'59''$  (B1950)  
 $13^{\text{h}}42^{\text{m}}37.1^{\text{s}}$   $05^{\circ}04'54''$  (J2000)  
 $l: 334.14$   $b: 64.81$

DATE: 1980/ 17 - 1980/ 17  
 LIVETIME: 970.2s  
 ROLL ANGLE:  $-110.6^{\circ}$

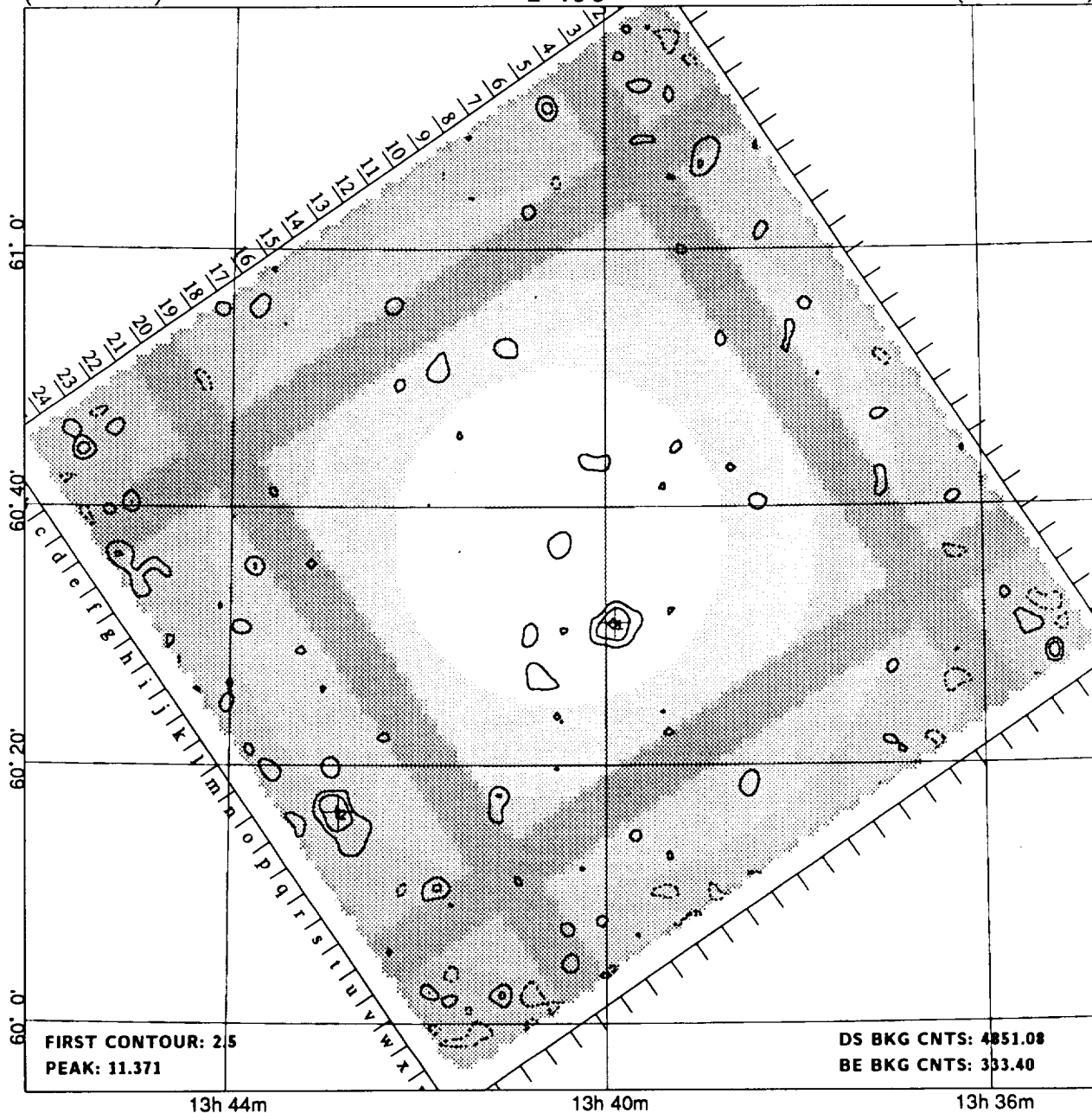
NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3124	1	13 39 37.3	05 20 17	42	0.0353	0.0078	23.7	3.3	4.6	1.0	0	6.8	AH	AGN

(13h 40m)

I 496

(13h 40m)



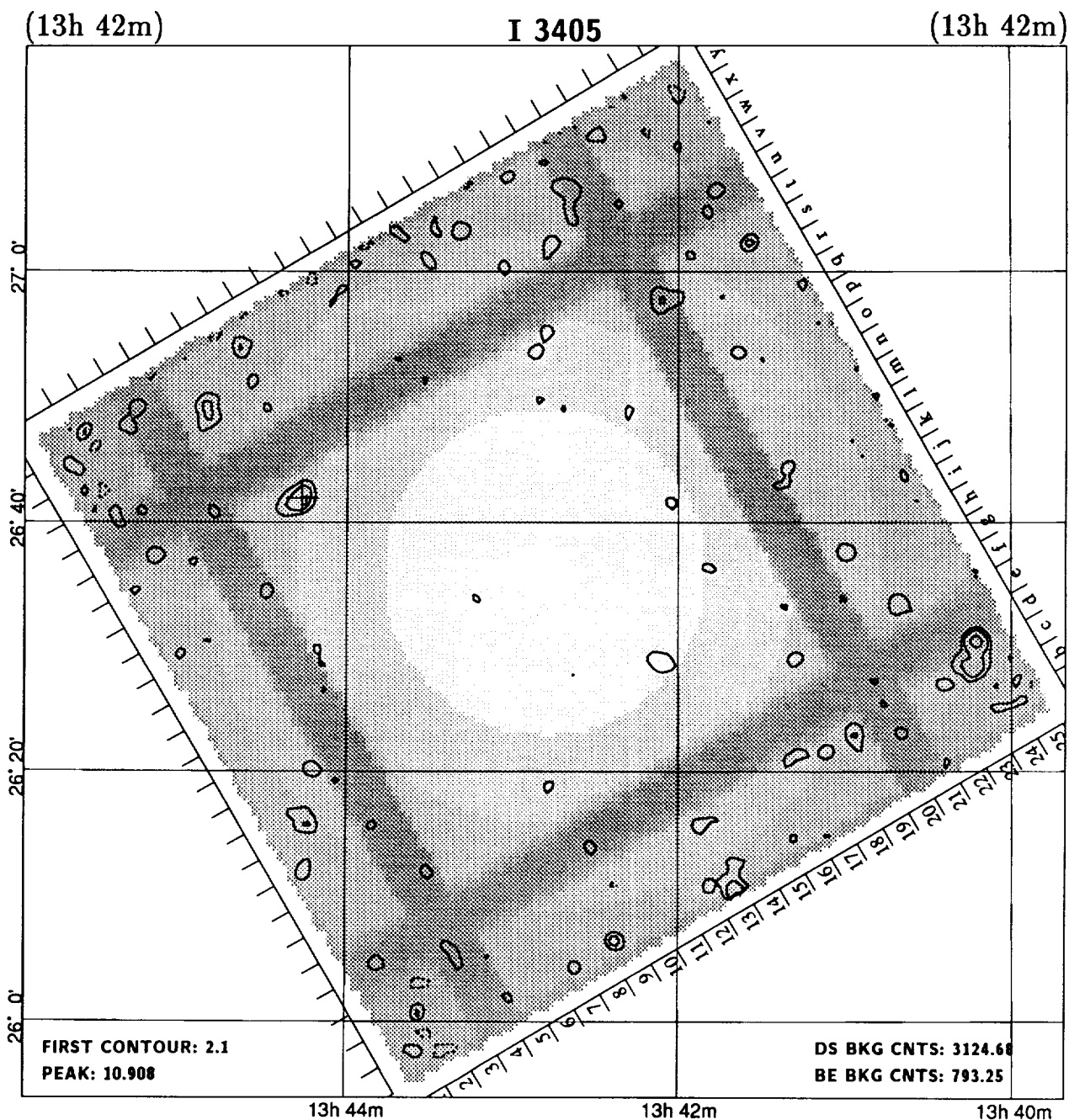
## 3CR 288.1 (QSO 1340+606) QUASAR SURVEY

FIELD CENTER:  $13^{\text{h}}40^{\text{m}}29.9^{\text{s}}$   $60^{\circ}36'47''$  (B1950)  
 $13^{\text{h}}42^{\text{m}}13.1^{\text{s}}$   $60^{\circ}21'42''$  (J2000)  
 $l: 111.82$   $b: 55.66$

DATE: 1979/171 - 1979/171  
 LIVETIME: 3931.0s  
 ROLL ANGLE:  $55.7^{\circ}$

NH:  $1.9\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3126	1	13 39 54.2	60 31 04	41	0.0139	0.0026	37.6	12.4	5.3	1.1	0	7.4	H	S
3132	2	13 42 50.6	60 16 23	55	0.0156	0.0037	24.0	9.0	4.2	1.3	0	26.7	H	



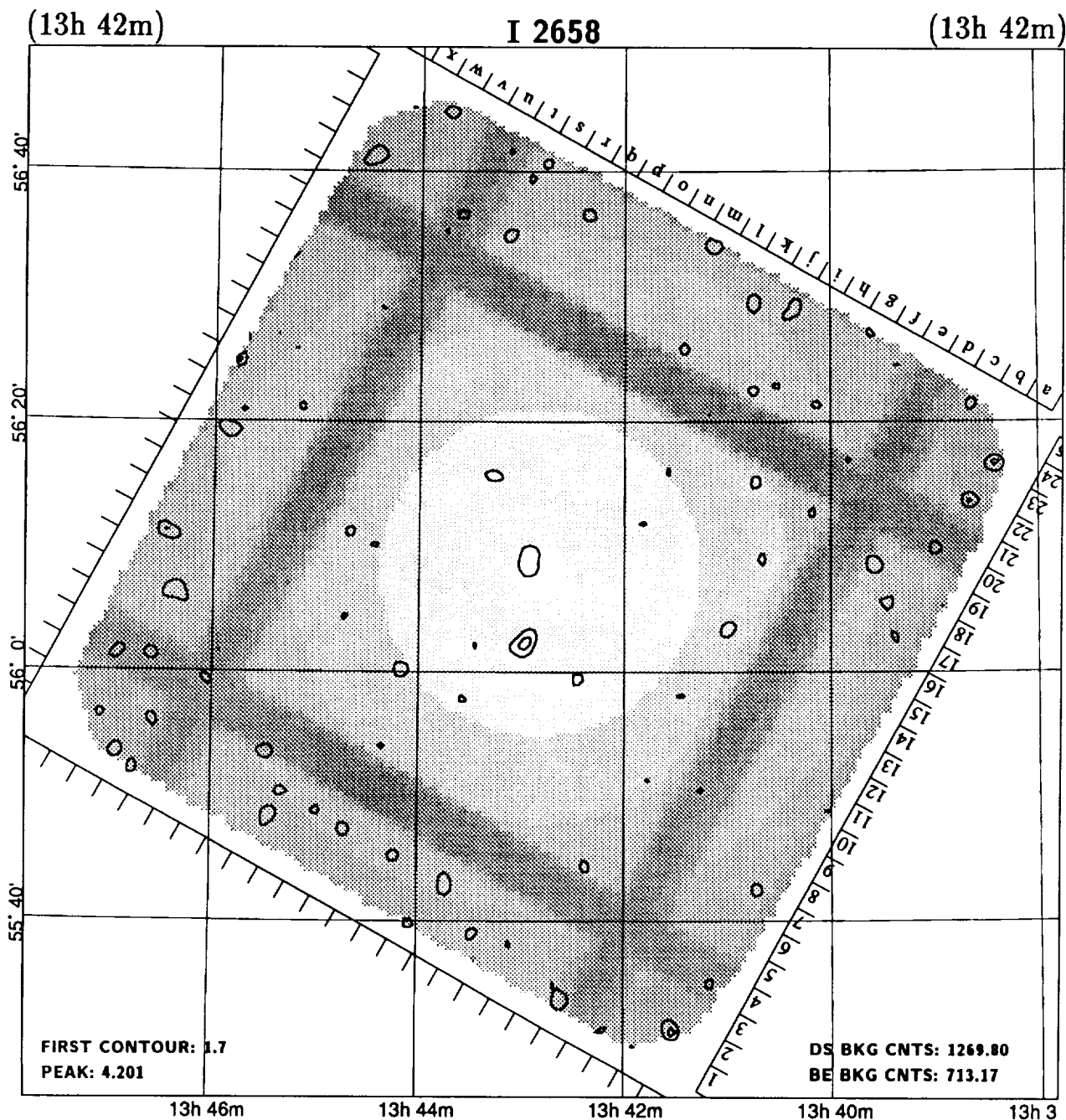
**A 1795 HALO EMISSION AROUND CLUSTER**

FIELD CENTER:  $13^{\text{h}}42^{\text{m}}48.0^{\text{s}}$   $26^{\circ}35'59''$  (B1950)  
 $13^{\text{h}}45^{\text{m}}07.1^{\text{s}}$   $26^{\circ}20'59''$  (J2000)  
 $l: 32.26$   $b: 78.00$

DATE: 1978/360 - 1978/360  
 LIVETIME: 2532.0s  
 ROLL ANGLE:  $-120.4^{\circ}$

NH:  $1.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3137	1	13 44 16.3	26 41 56	52	0.0157	0.0041	19.9	7.1	3.8	0.9	200	20.8	H	



SEYFERT GALAXY SURVEY: MKN 273:

FIELD CENTER:  $13^{\text{h}}42^{\text{m}}48.0^{\text{s}}$   $56^{\circ}07'59''$  (B1950)  
 $13^{\text{h}}44^{\text{m}}38.4^{\text{s}}$   $55^{\circ}52'58''$  (J2000)  
 $l: 108.12$   $b: 59.69$

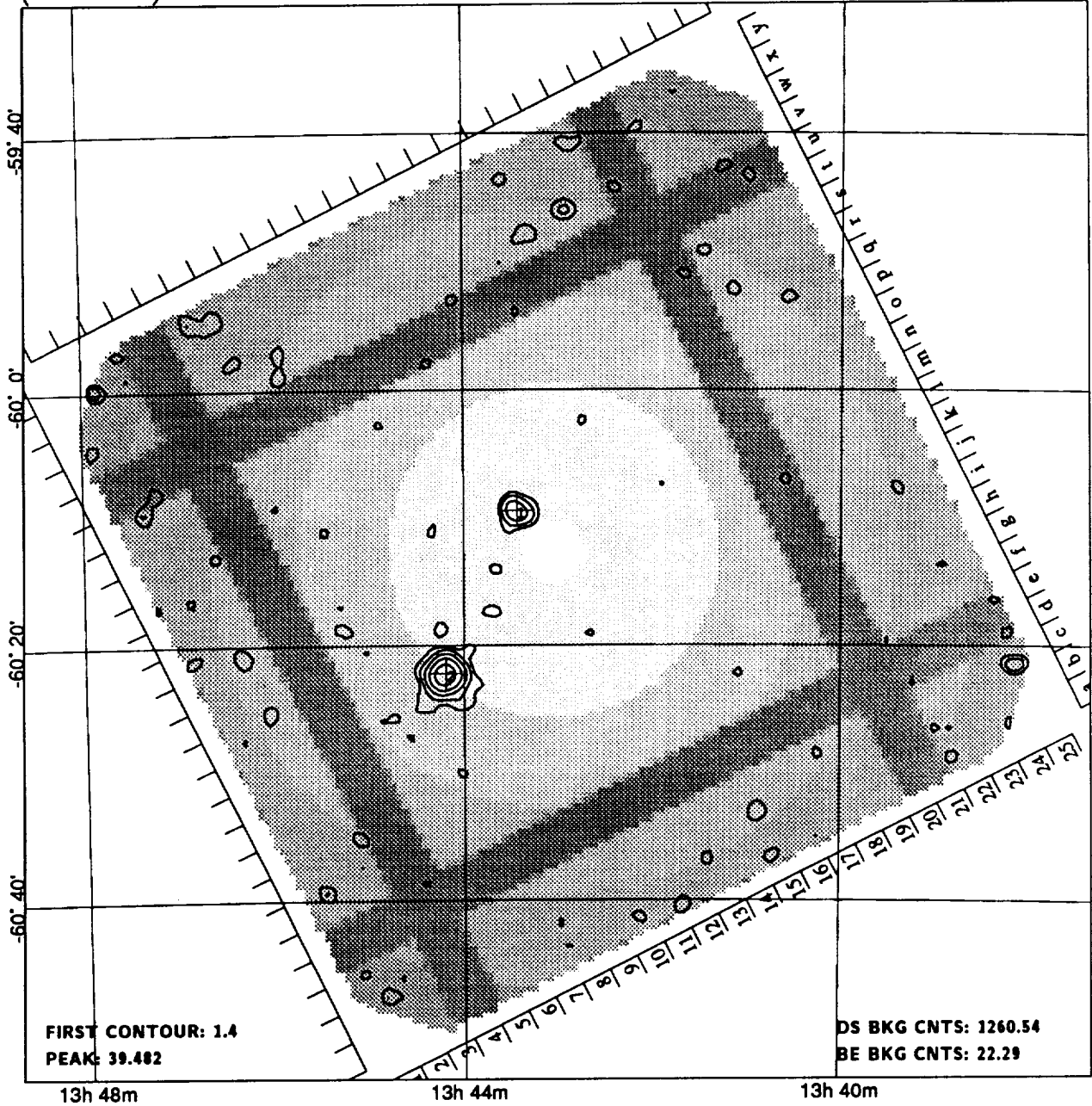
DATE: 1979/325 - 1979/325  
 LIVETIME: 1029.0s  
 ROLL ANGLE:  $-151.1^{\circ}$

NH:  $1.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 43m)

I 768

(13h 43m)



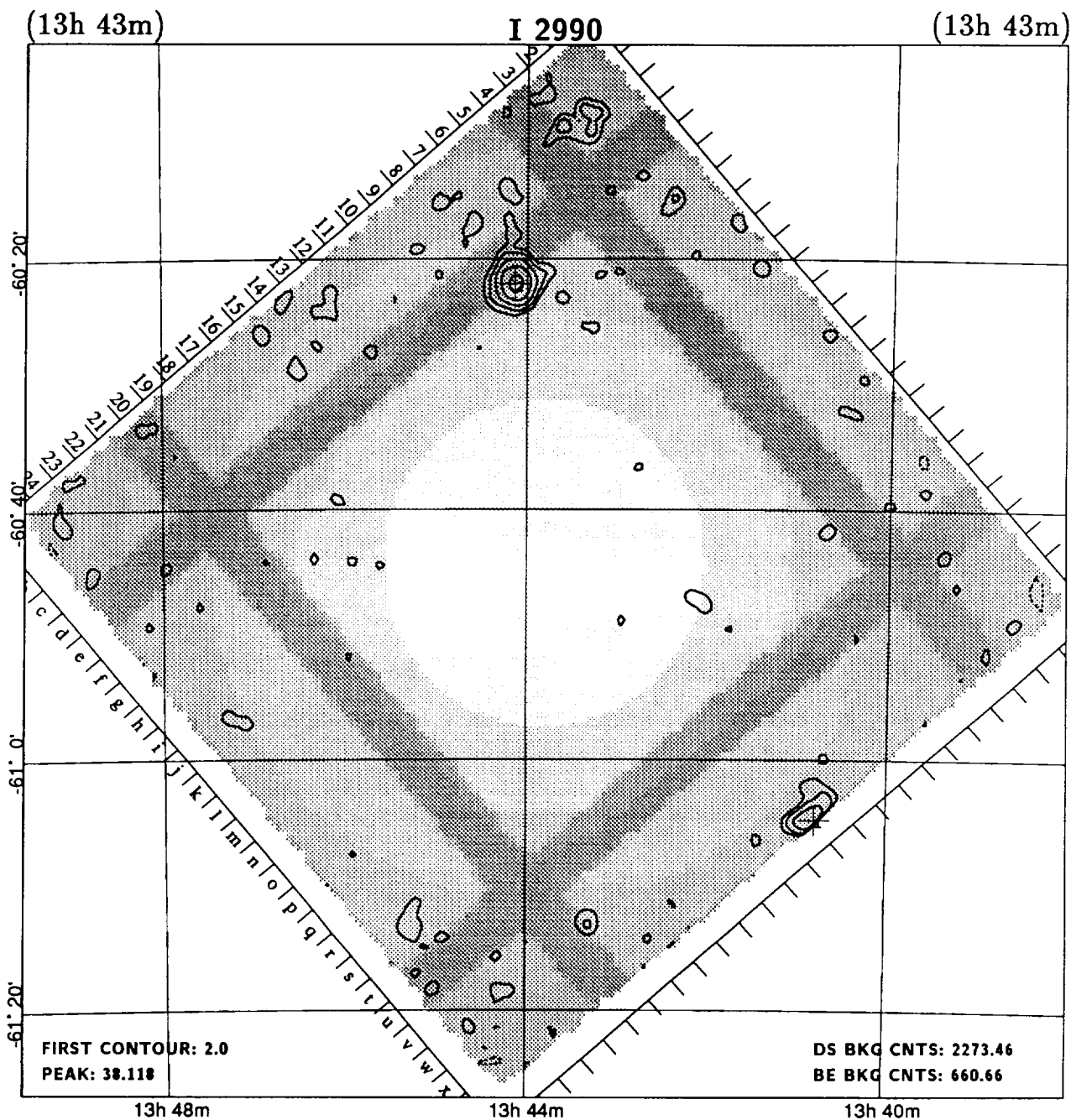
## KE 19 A,B SNR'S, SEARCH FOR X-RAY EMISSION

FIELD CENTER:  $13^h 43^m 00.0^s$   $-60^\circ 11' 59''$  (B1950)  
 $13^h 46^m 25.5^s$   $-60^\circ 26' 59''$  (J2000)  
 $l: 309.67$   $b: 1.70$

DATE: 1979/ 35 - 1979/ 35  
 LIVETIME: 1021.5s  
 ROLL ANGLE:  $-116.6^\circ$

NH:  $1.7E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3133	1	13 43 25.9	-60 09 26	35	0.0447	0.0082	32.8	3.2	5.5	0.8	0	4.2	
3136	2	13 44 11.6	-60 22 11	38	0.172	0.017	110.2	2.8	10.4	1.1	0	13.6	AH



FIELD CENTER:  $13^h 43^m 48.0^s$   $-60^\circ 44' 59''$  (B1950)  
 $13^h 47^m 15.0^s$   $-60^\circ 59' 57''$  (J2000)  
 $l: 309.65$   $b: 1.14$

DATE: 1979/240 - 1979/240  
 LIVETIME: 1842.3s  
 ROLL ANGLE:  $49.4^\circ$

NH:  $1.7E+21$   
 REF/ID:  
 FIELD FLAGS:

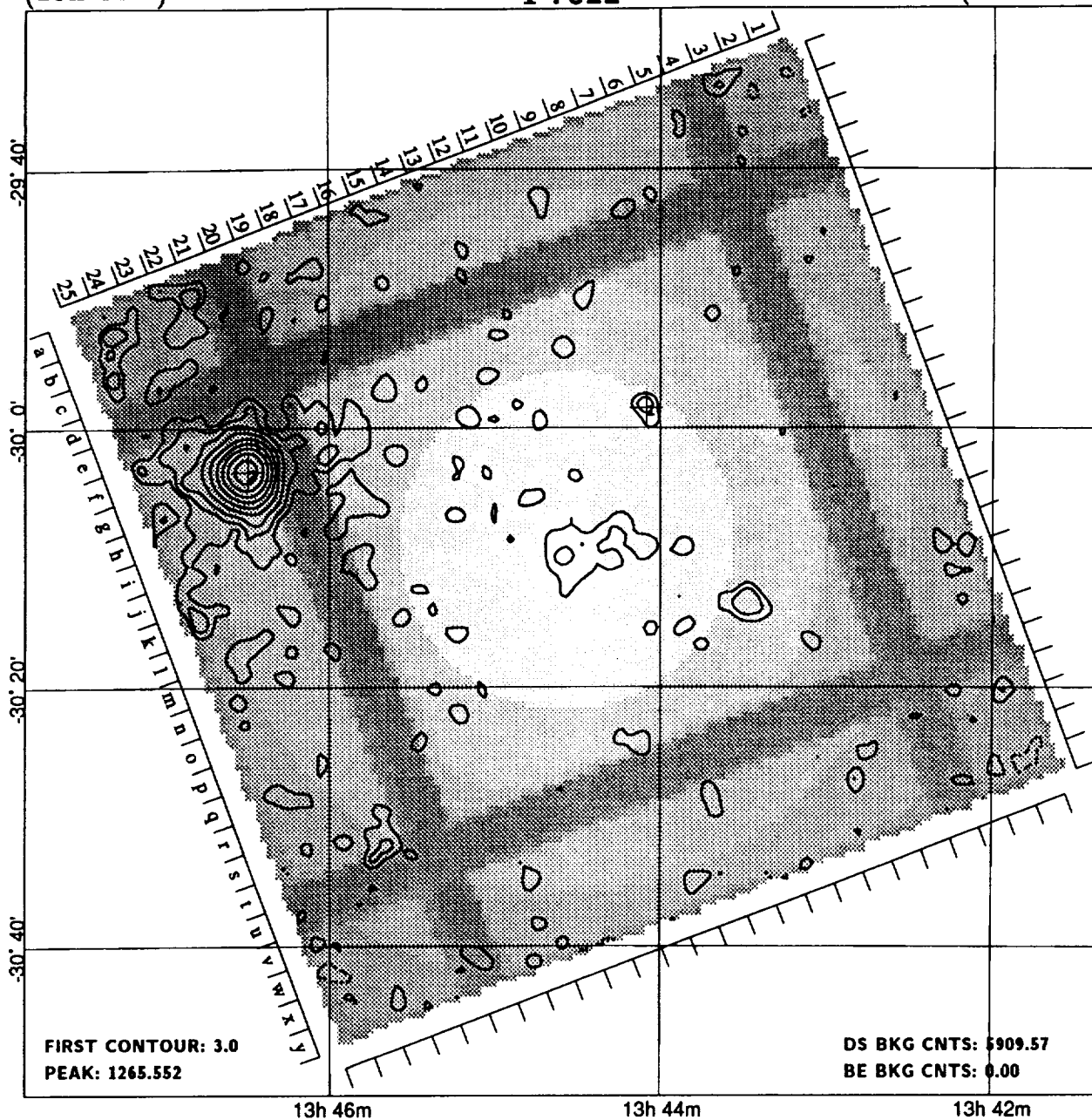
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3130	1	13 40 47.4	-61 04 46	50	*0.155	0.021	56.8	4.2	7.3	1.8	806	29.7	aEH
3136	2	13 44 08.2	-60 22 00	48	*0.122	0.012	106.3	2.7	10.2	1.3	1006	23.2	AH



(13h 44m)

I 7822

(13h 44m)



NGC 5291

FIELD CENTER:  $13^h 44^m 35.0^s$   $-30^\circ 09' 35''$  (B1950)  
 $13^h 47^m 26.2^s$   $-30^\circ 24' 32''$  (J2000)  
 $l: 317.01$   $b: 30.93$

DATE: 1980/205 - 1980/205  
 LIVETIME: 4788.7s  
 ROLL ANGLE:  $69.4^\circ$

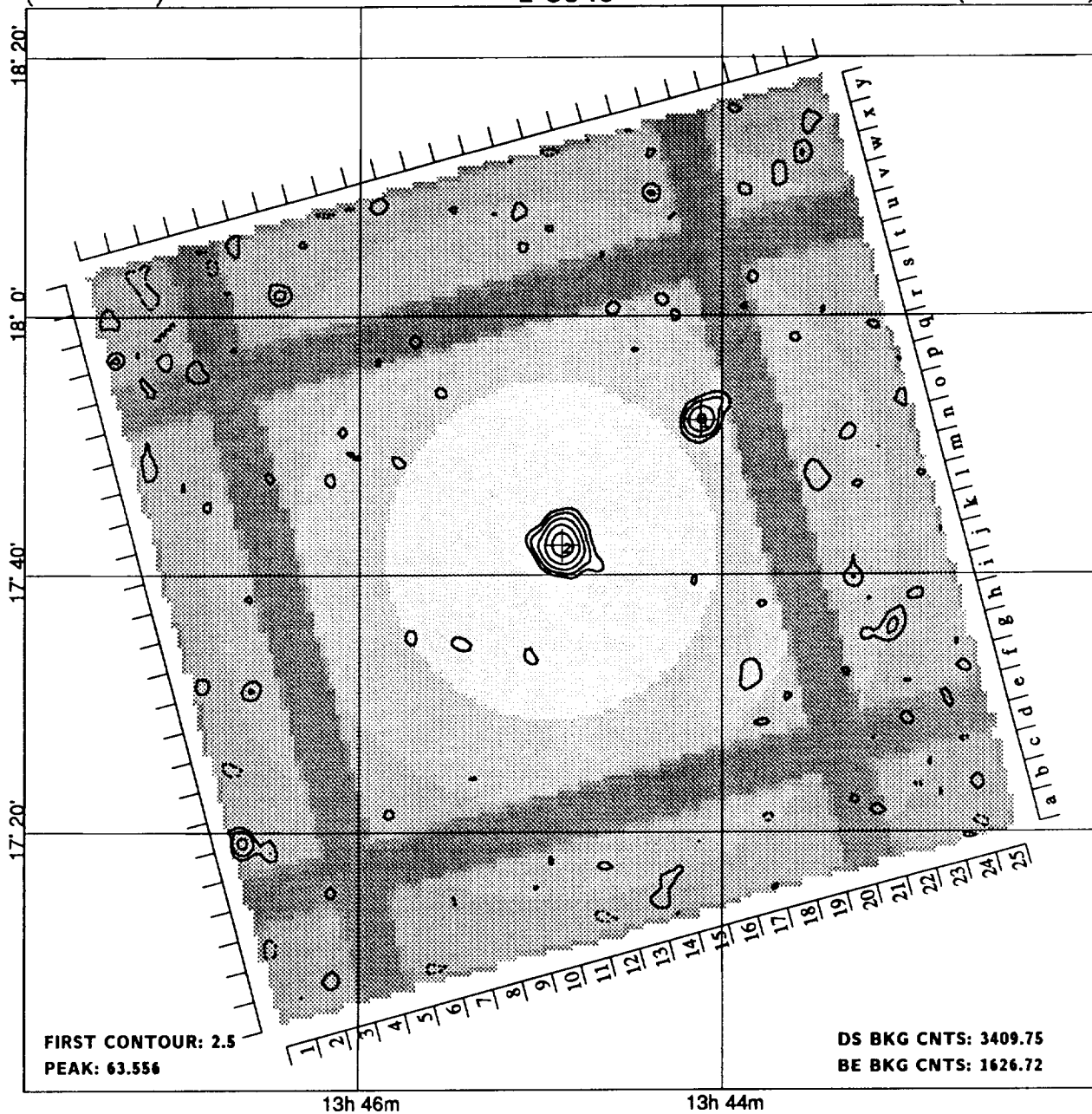
NH:  $4.3E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3134	1L	13 44 05.0	-29 58 27	46	0.0096	0.0025	29.6	12.4	3.7	0.6	0	12.9		
3141	2L	13 46 29.1	-30 03 21	47	*1.329	0.033	2683.8	280.6	40.3	1.3	601	25.5		

(13h 44m)

I 5549

(13h 44m)



Tau B00

FIELD CENTER:  $13^h 44^m 54.0^s$   $17^\circ 41' 59''$  (B1950)  
 $13^h 47^m 18.3^s$   $17^\circ 27' 03''$  (J2000)  
 $l: 358.94$   $b: 73.88$

DATE: 1981/ 26 - 1981/ 26  
 LIVETIME: 2763.0s  
 ROLL ANGLE:  $-104.9^\circ$

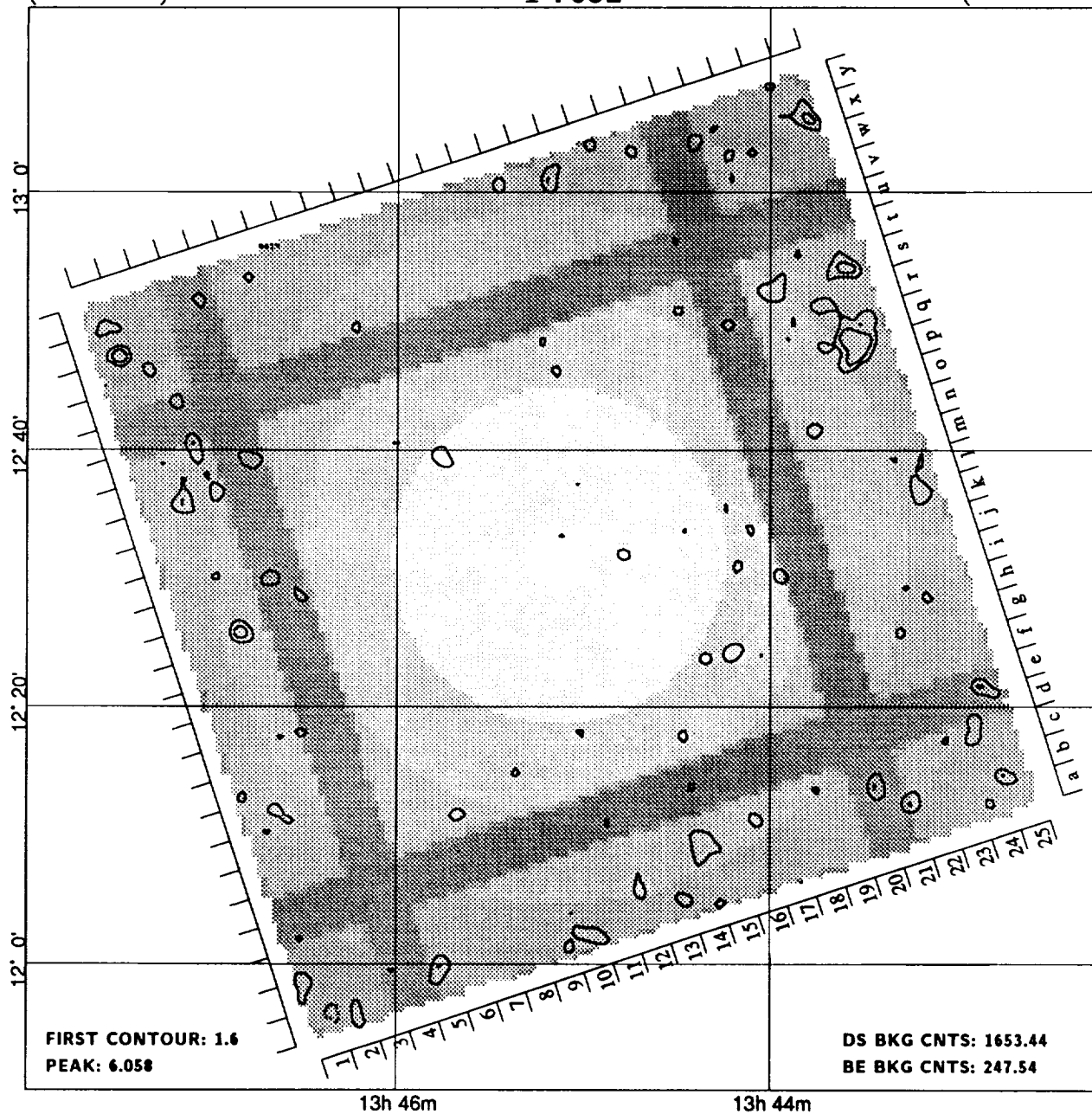
NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3135	1L	13 44 07.0	17 51 55	50	0.0323	0.0060	52.2	15.8	5.3	1.0	100	15.1		
3138	2L	13 44 52.8	17 42 16	31	0.1160	0.0091	238.5	34.5	12.6	1.2	0	0.4		S

(13h 45m)

I 7632

(13h 45m)



1345+12, LOW FREQUENCY VARIABLES

FIELD CENTER:  $13^{\text{h}}45^{\text{m}}06.2^{\text{s}}$   $12^{\circ}32'19''$  (B1950)  
 $13^{\text{h}}47^{\text{m}}33.4^{\text{s}}$   $12^{\circ}17'23''$  (J2000)  
 $l: 347.22$   $b: 70.17$

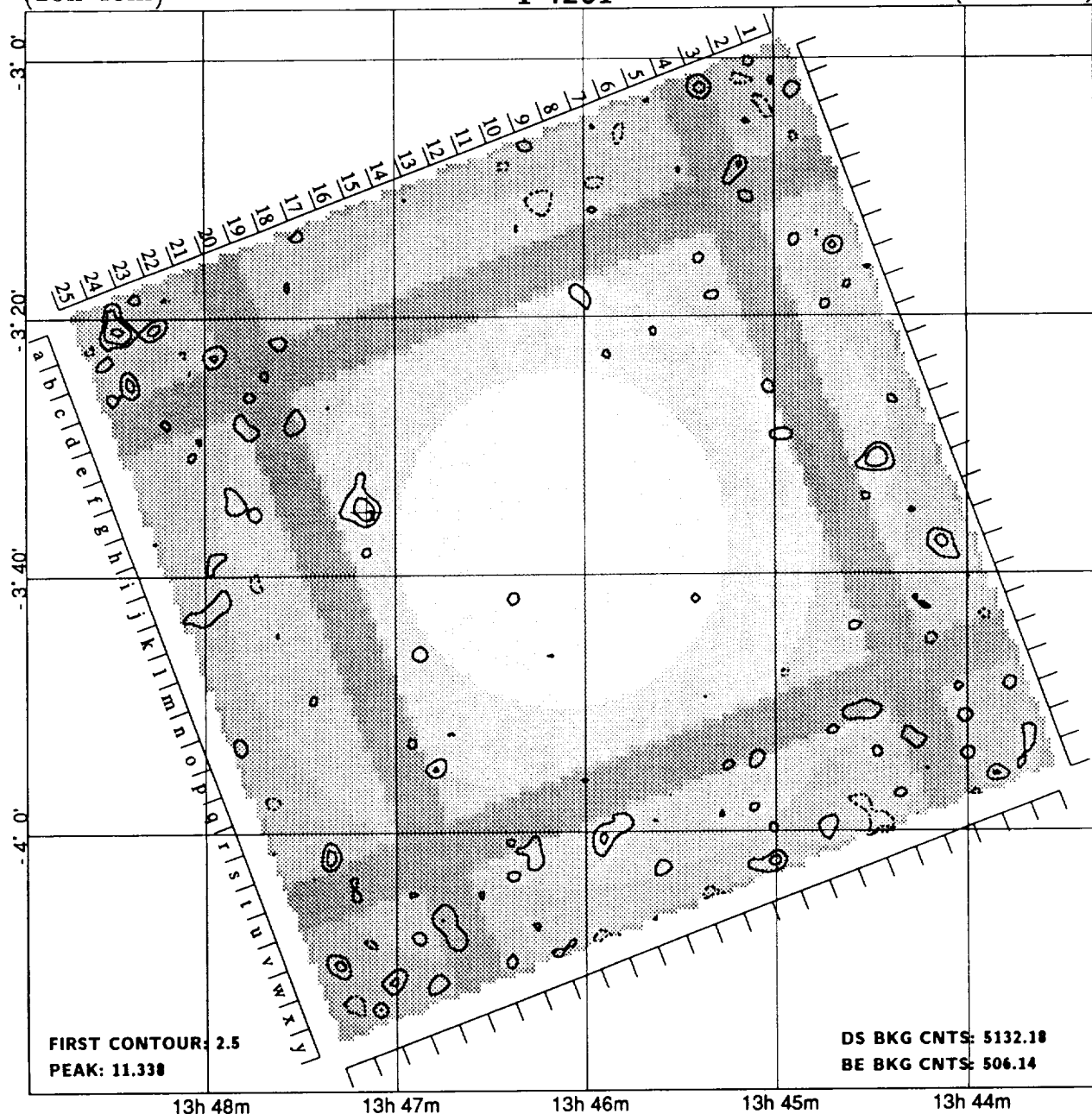
DATE: 1980/ 22 - 1980/ 22  
LIVETIME: 1339.8s  
ROLL ANGLE:  $-108.1^{\circ}$

NH:  $1.9\text{E}+20$   
REF/ID:  
FIELD FLAGS:

(13h 46m)

I 4261

(13h 46m)



OPTICALLY BRIGHT, RADIO-QUIET QSO

FIELD CENTER:  $13^h 46^m 08.0^s$   $-03^\circ 38' 03''$  (B1950)  
 $13^h 48^m 43.7^s$   $-03^\circ 52' 58''$  (J2000)  
 $l: 329.16$   $b: 56.04$

DATE: 1979/203 - 1979/203  
 LIVETIME: 4158.8s  
 ROLL ANGLE:  $69.3^\circ$

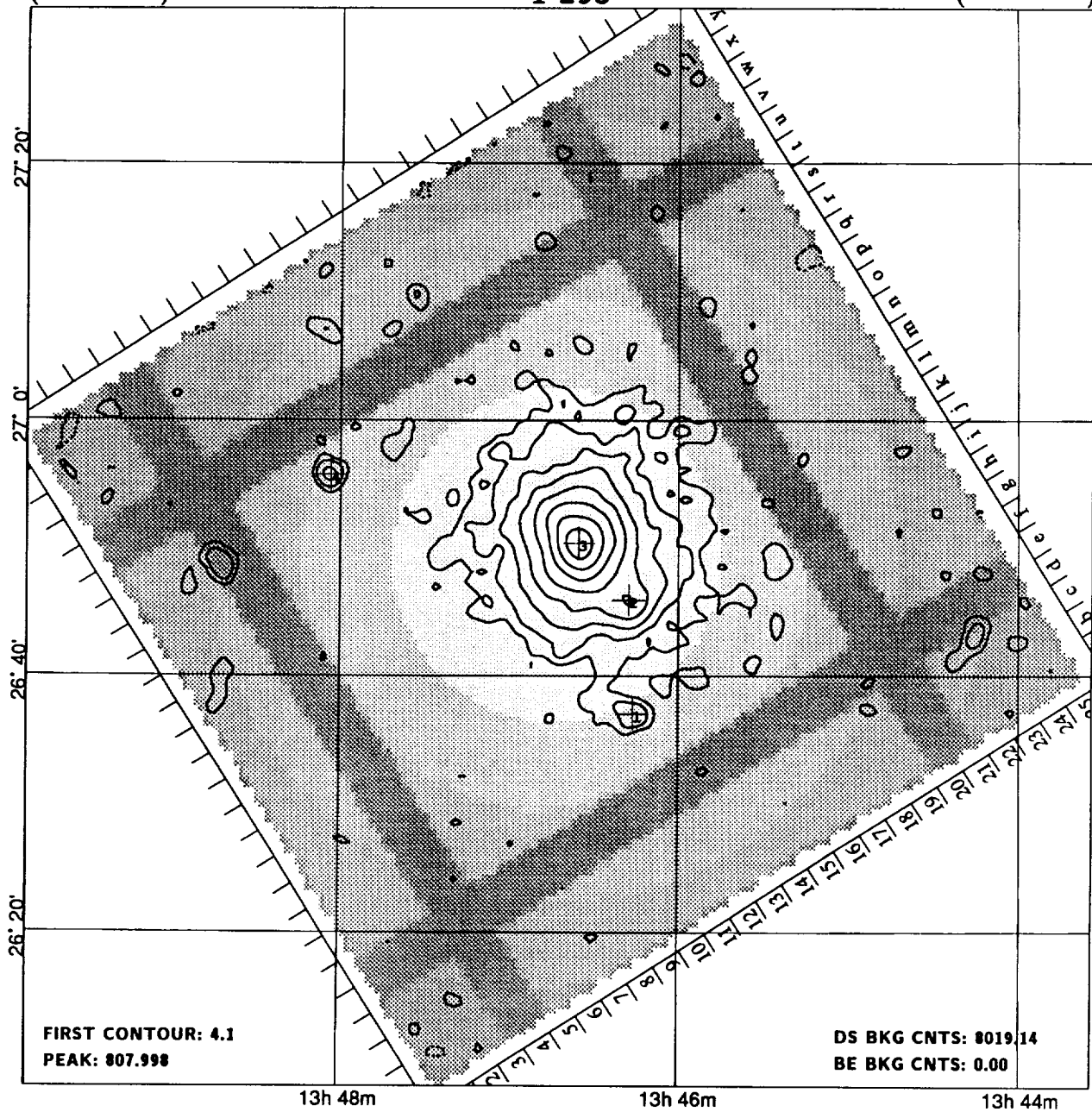
NH:  $2.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3143	1	13 47 09.0	-03 35 02	52	0.0093	0.0024	22.6	11.4	3.9	1.0	100	16.5	H	

(13h 46m)

I 293

(13h 46m)



## A1795 DETAILED CLUSTER STUDY

FIELD CENTER:  $13^{\text{h}}46^{\text{m}}42.0^{\text{s}}$   $26^{\circ}49'59''$  (B1950)  
 $13^{\text{h}}49^{\text{m}}00.5^{\text{s}}$   $26^{\circ}35'06''$  (J2000)  
 $l: 33.79$   $b: 77.16$

DATE: 1978/358 - 1978/358  
 LIVETIME: 6498.2s  
 ROLL ANGLE:  $-122.3^{\circ}$

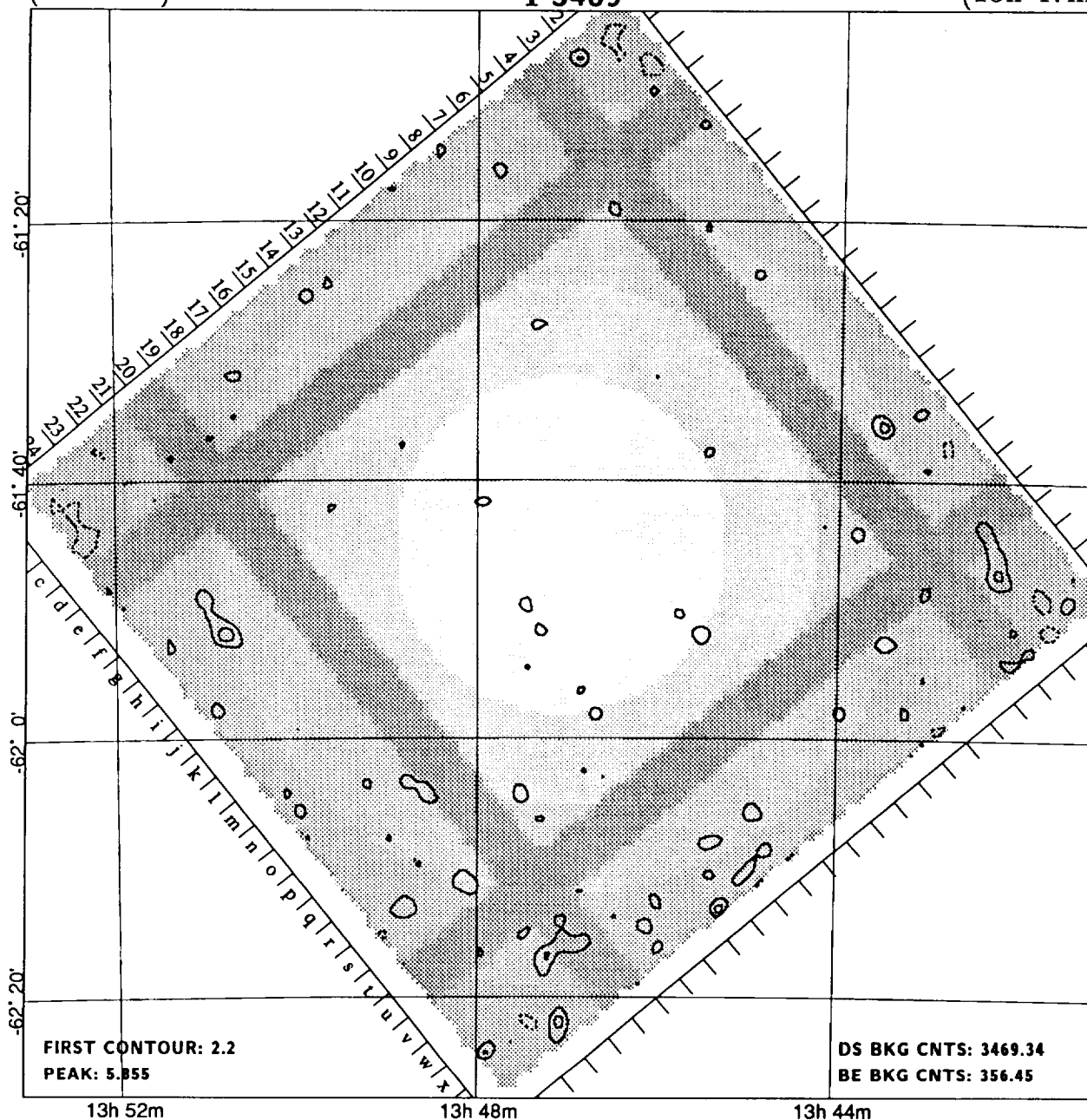
NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3139	1L	13 46 16.0	26 37 01	43	0.0124	0.0025	49.2	22.8	4.8	194.7	0	14.2		
3140	2L	13 46 17.5	26 46 00	38	0.0326	0.0050	148.4	188.6	6.4	34.1	0	6.7		
3142	3L	13 46 35.4	26 50 23	31	0.517	0.015	2476.6	1327.4	33.5	3.3	0	1.5		
3144	4L	13 48 03.4	26 55 44	50	0.0148	0.0028	50.6	15.4	5.2	0.8	100	19.0	CLG	

(13h 47m)

I 3489

(13h 47m)



1347-617/G309.8+0.0, COMPACT RADIO SOURCE ASSOCIATED WITH SNR

FIELD CENTER:  $13^{\text{h}}47^{\text{m}}04.0^{\text{s}}$   $-61^{\circ}45'53''$  (B1950)  
 $13^{\text{h}}50^{\text{m}}34.9^{\text{s}}$   $-62^{\circ}00'45''$  (J2000)  
 $l: 309.81$   $b: 0.07$

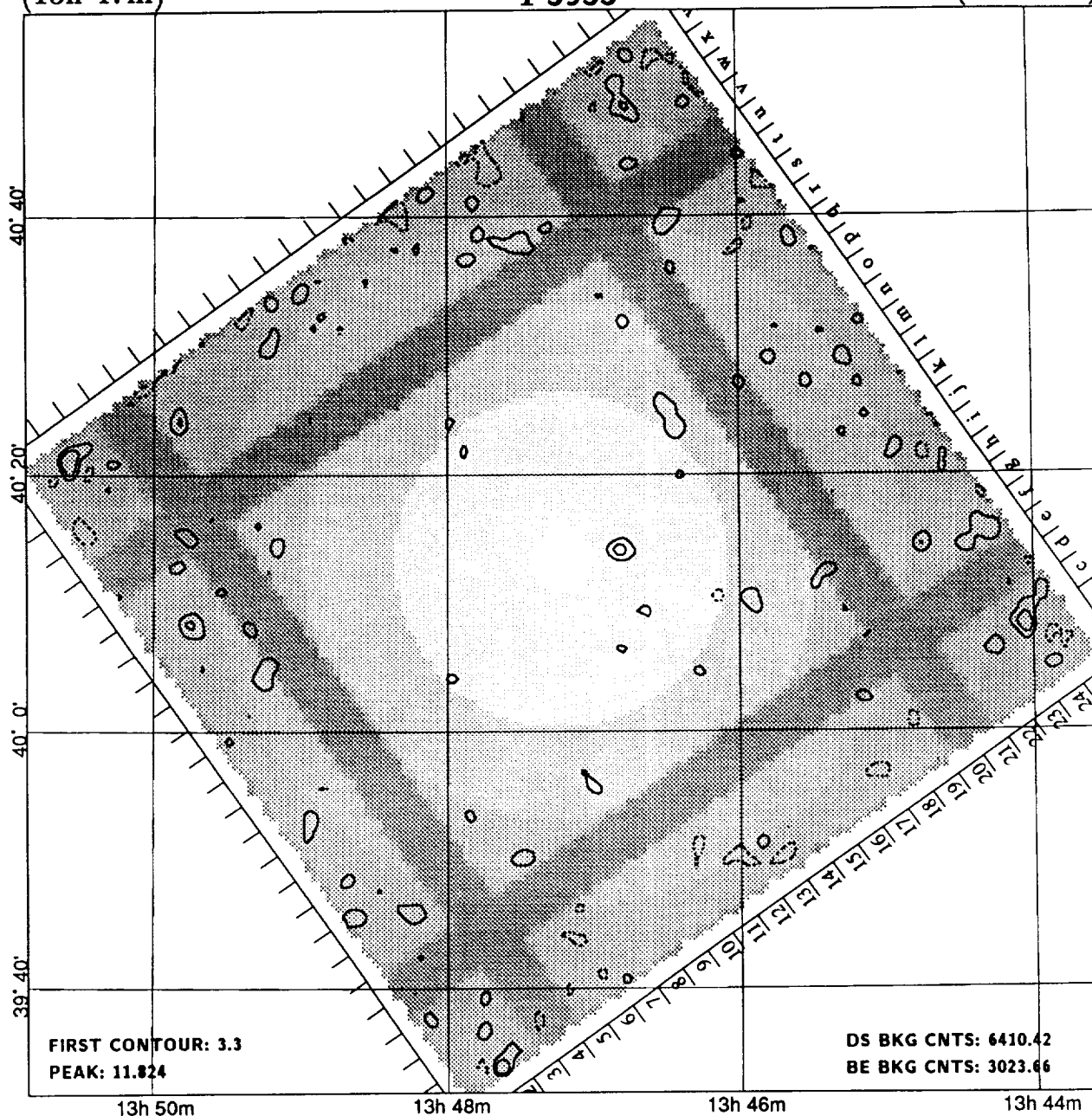
DATE: 1979/239 - 1979/239  
 LIVETIME: 2811.3s  
 ROLL ANGLE:  $50.6^{\circ}$

NH:  $1.7\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

(13h 47m)

I 3935

(13h 47m)



FIRST CONTOUR: 3.3  
PEAK: 11.824

DS BKG CNTS: 6410.42  
BE BKG CNTS: 3023.66

13h 50m

13h 48m

13h 46m

13h 44m

## TG 77 GROUP OF GALAXIES

FIELD CENTER:  $13^h 47^m 12.0^s$   $40^\circ 13' 58''$  (B1950)  
 $13^h 49^m 20.1^s$   $39^\circ 59' 06''$  (J2000)  
 $\ell$ : 83.59  $b$ : 72.42

DATE: 1979/347 - 1979/347  
LIVETIME: 5194.6s  
ROLL ANGLE:  $-125.1^\circ$

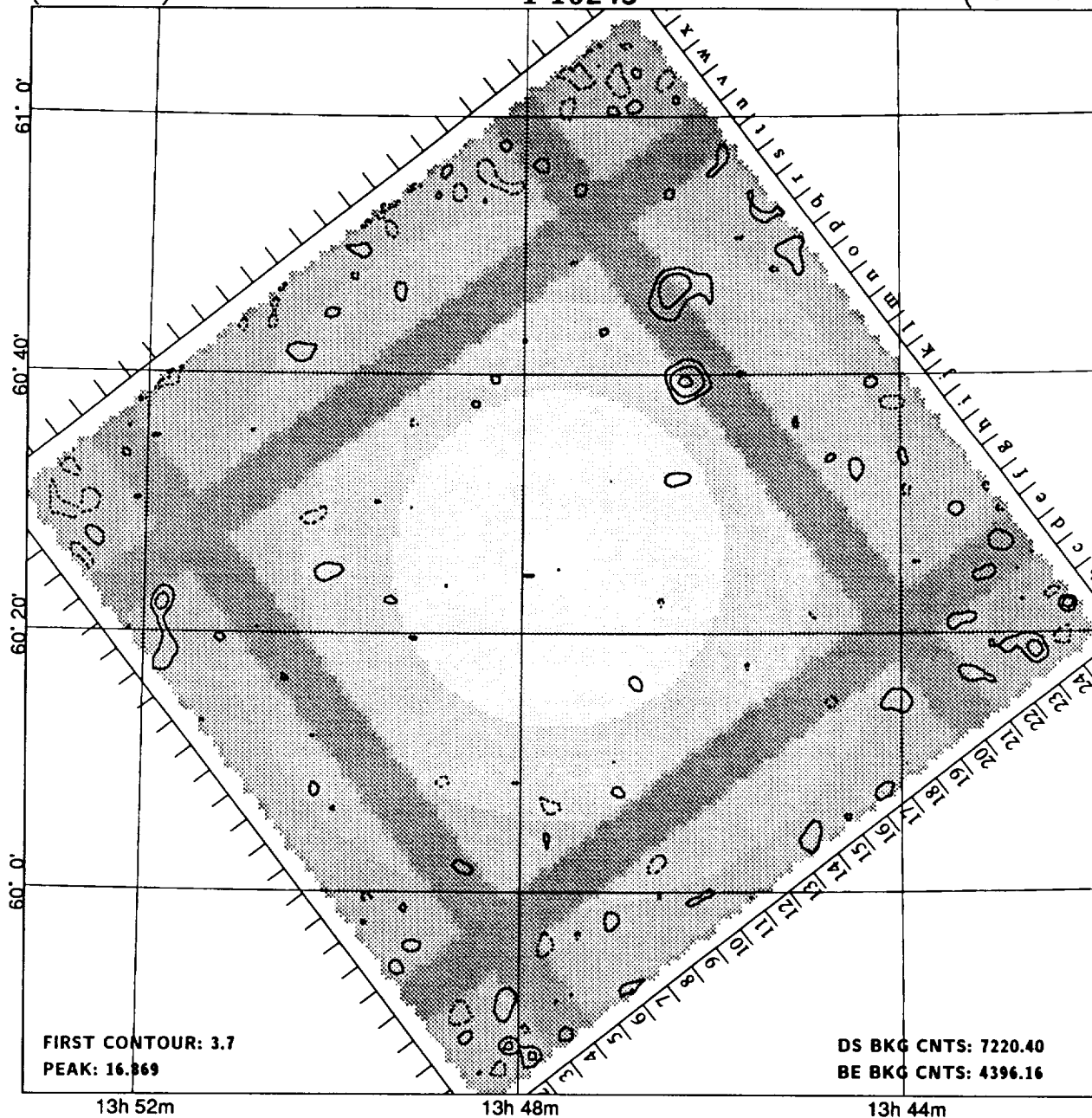
NH:  $9.2E+19$   
REF/ID:  
FIELD FLAGS: L



(13h 47m)

I 10245

(13h 47m)



## N 5322: E &amp; SO GALAXIES W/ COMPACT NUCLEAR RADIO CORES

FIELD CENTER:  $13^{\text{h}}47^{\text{m}}35.1^{\text{s}}$   $60^{\circ}26'20''$  (B1950)  
 $13^{\text{h}}49^{\text{m}}15.4^{\text{s}}$   $60^{\circ}11'28''$  (J2000)  
 $l: 110.28$   $b: 55.49$

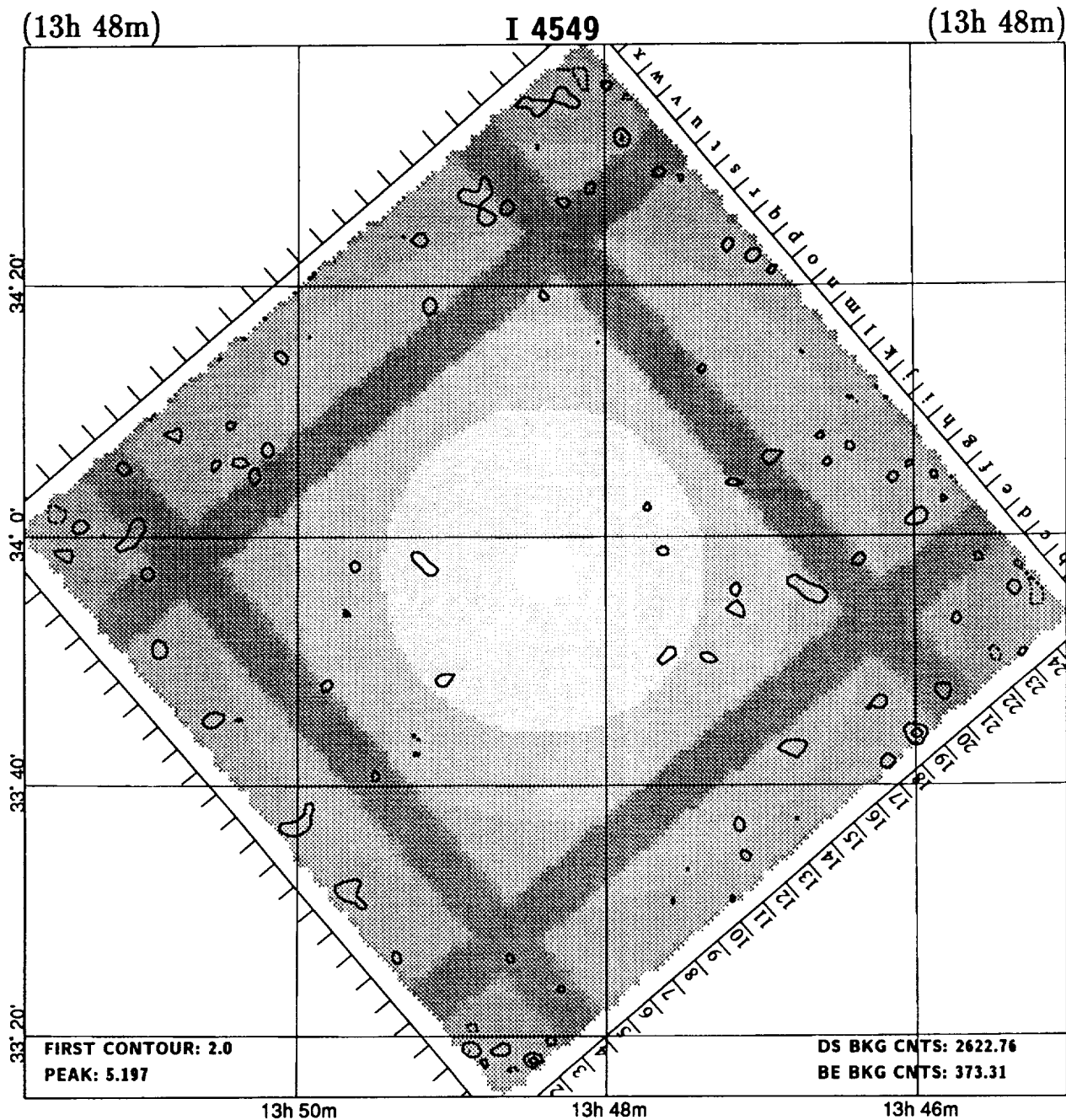
DATE: 1980/358 - 1980/358

LIVETIME: 5851.0s

ROLL ANGLE:  $-127.7^{\circ}$ NH:  $1.0\text{E}+20$ 

REF/ID:

FIELD FLAGS: LS



NGC 5318, EL & S0 GAL. WITH COMPACT RADIO CORE

FIELD CENTER:  $13^{\text{h}}48^{\text{m}}23.4^{\text{s}}$   $33^{\circ}57'14''$  (B1950)  
 $13^{\text{h}}50^{\text{m}}36.5^{\text{s}}$   $33^{\circ}42'25''$  (J2000)  
 $l: 63.84$   $b: 75.67$

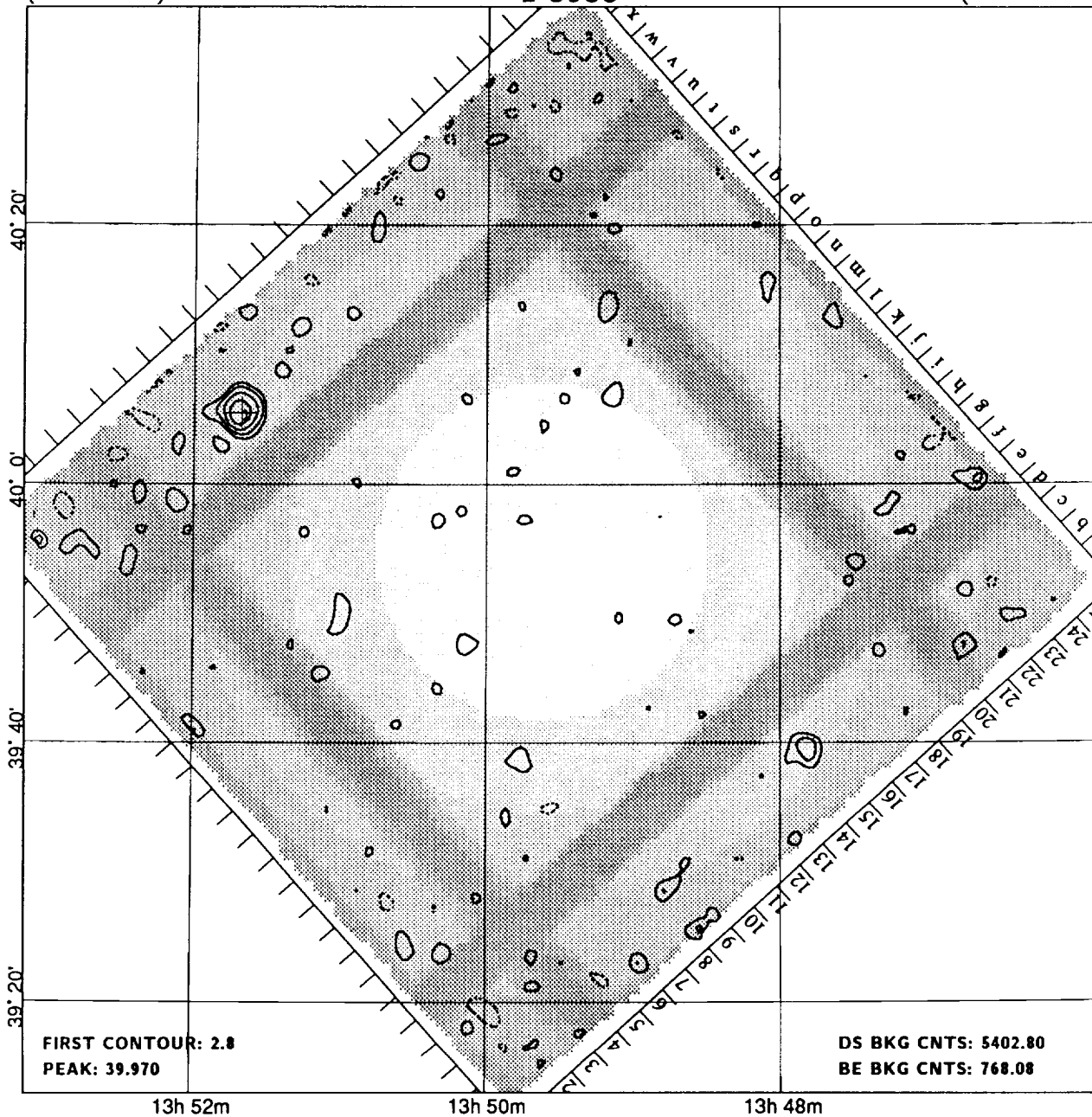
DATE: 1979/348 - 1979/348  
 LIVETIME: 2125.3s  
 ROLL ANGLE:  $-130.4^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 49m)

I 3933

(13h 49m)



## TG 77 GROUP OF GALAXIES

FIELD CENTER:  $13^h 49^m 30.0^s$   $39^\circ 54' 57''$  (B1950)  
 $13^h 51^m 37.9^s$   $39^\circ 40' 09''$  (J2000)  
 $l: 81.84$   $b: 72.30$

DATE: 1979/347 - 1979/347  
 LIVETIME: 4378.1s  
 ROLL ANGLE:  $-131.9^\circ$

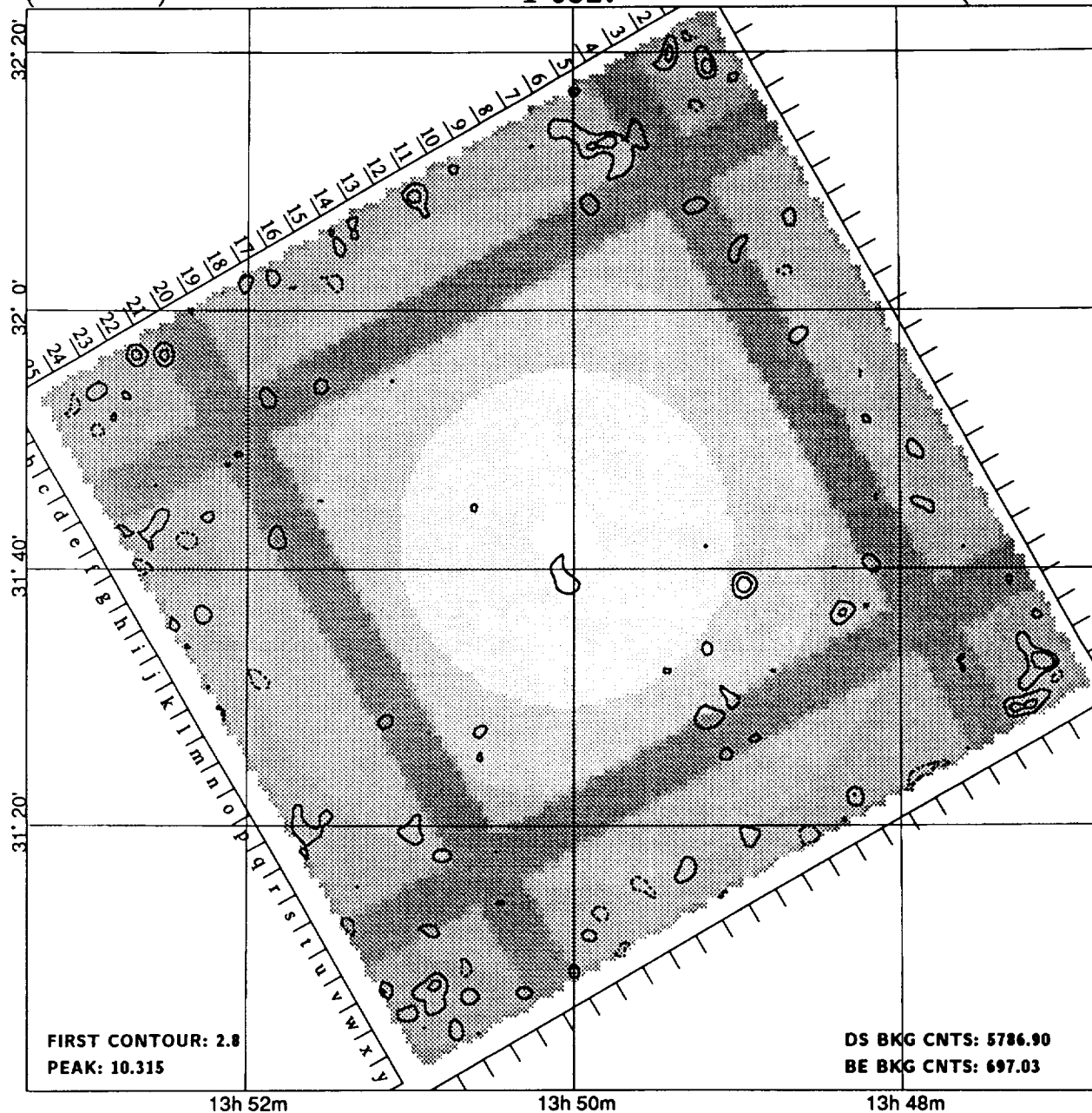
NH:  $9.6E+19$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3146	1	13 51 40.6	40 05 29	48	0.0432	0.0052	78.2	8.8	8.4	1.1	0	27.3	AH	

(13h 50m)

I 6327

(13h 50m)



3CR 293, 3CR RADIO GAL. W/SEYFERT-LIKE OPT. SPECTRA

FIELD CENTER:  $13^{\text{h}}50^{\text{m}}03.4^{\text{s}}$   $31^{\circ}41'31''$  (B1950)  
 $13^{\text{h}}52^{\text{m}}18.0^{\text{s}}$   $31^{\circ}26'45''$  (J2000)  
 $l: 54.59$   $b: 76.06$

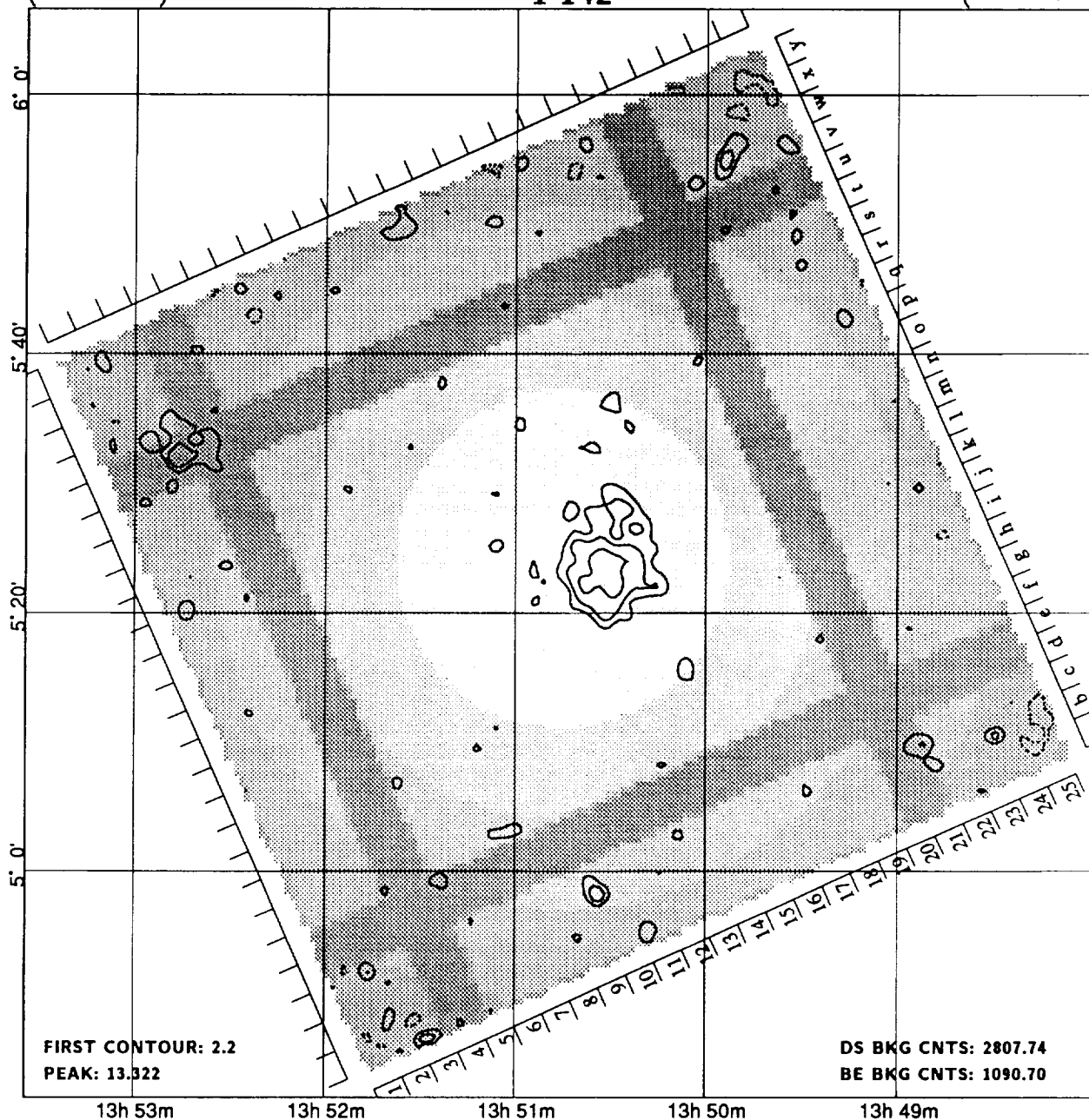
DATE: 1980/181 - 1980/181  
 LIVETIME: 4689.3s  
 ROLL ANGLE:  $60.2^{\circ}$

NH:  $1.3\text{E}+20$   
 REF/ID: I  
 FIELD FLAGS:

(13h 50m)

I 142

(13h 50m)



## A1809 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $13^{\text{h}}50^{\text{m}}45.6^{\text{s}}$   $05^{\circ}24'35''$  (B1950)  
 $13^{\text{h}}53^{\text{m}}16.4^{\text{s}}$   $05^{\circ}09'51''$  (J2000)  
 $l: 339.52$   $b: 63.55$

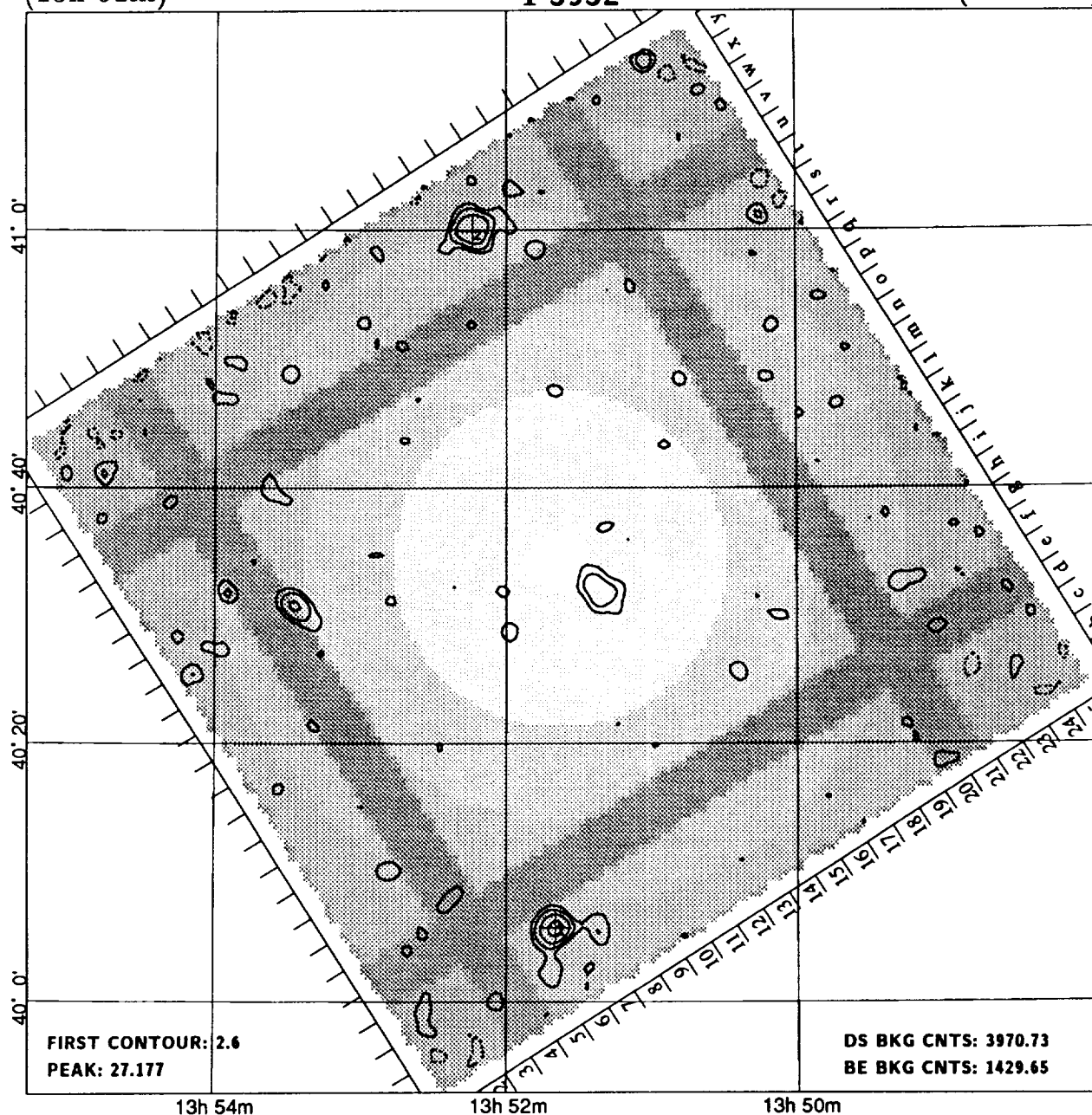
DATE: 1979/ 23 - 1979/ 24  
 LIVETIME: 2275.2s  
 ROLL ANGLE:  $-114.0^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: LS

(13h 51m)

I 3932

(13h 51m)



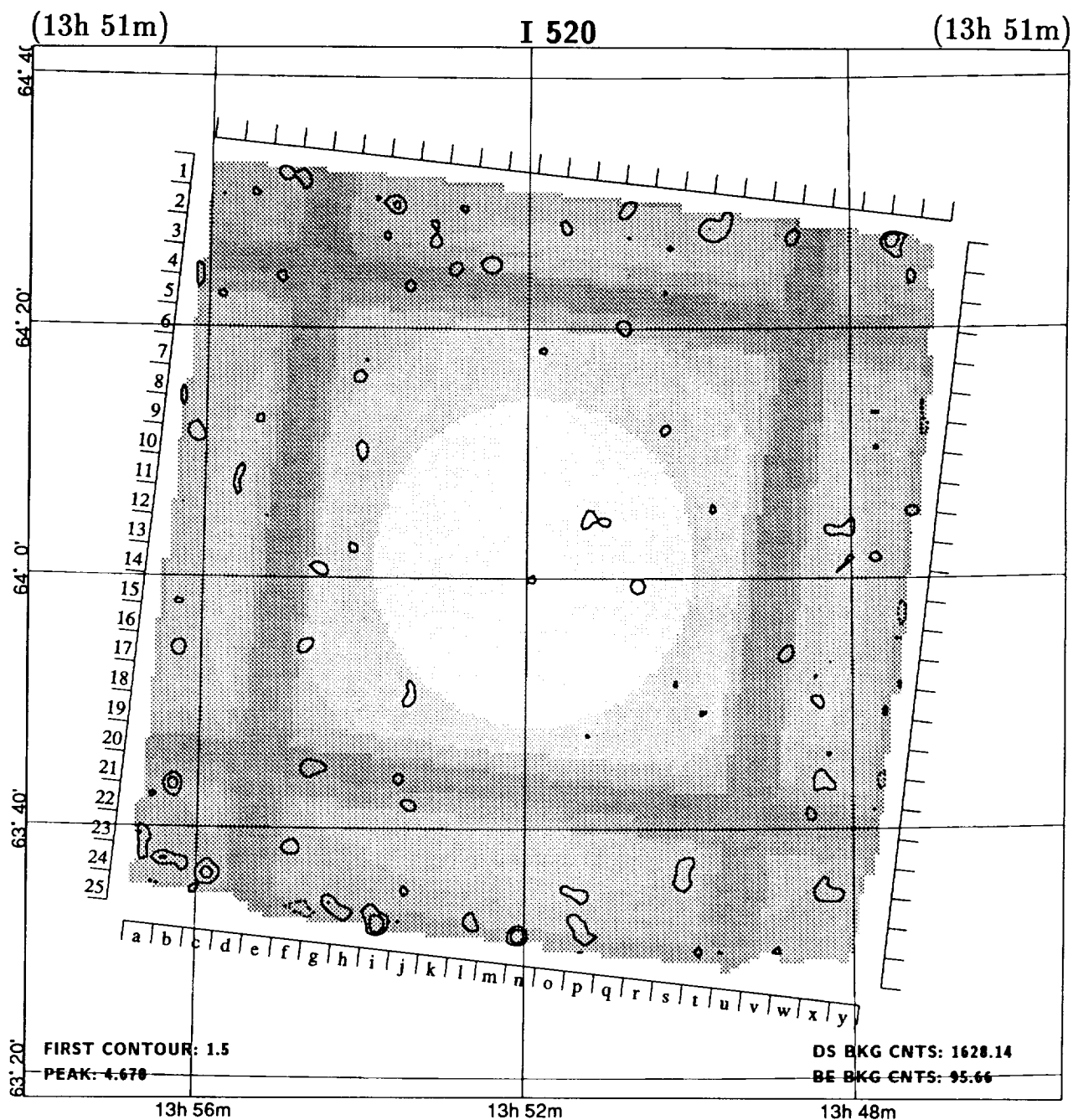
## TG 77 GROUP OF GALAXIES

FIELD CENTER:  $13^h 51^m 36.0^s$   $40^\circ 34' 58''$  (B1950)  
 $13^h 53^m 42.8^s$   $40^\circ 20' 15''$  (J2000)  
 $l: 82.63$   $b: 71.56$

DATE: 1979/347 - 1979/347  
 LIVETIME: 3217.6s  
 ROLL ANGLE:  $-122.3^\circ$

NH:  $1.1E+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3146	1L	13 51 39.7	40 05 47	50	0.0443	0.0073	53.3	5.7	5.9	1.2	300	29.2	A	
3149	2L	13 52 14.0	40 59 52	50	0.0358	0.0069	46.6	13.4	5.0	1.1	0	25.8		



QSO 1351+640 QUASAR SURVEY

FIELD CENTER:  $13^h 51^m 46.0^s$   $64^\circ 00' 27''$  (B1950)  
 $13^h 53^m 15.5^s$   $63^\circ 45' 44''$  (J2000)  
 $l: 111.89$   $b: 52.02$

DATE: 1979/117 - 1979/117  
 LIVETIME: 1319.3s  
 ROLL ANGLE:  $6.3^\circ$

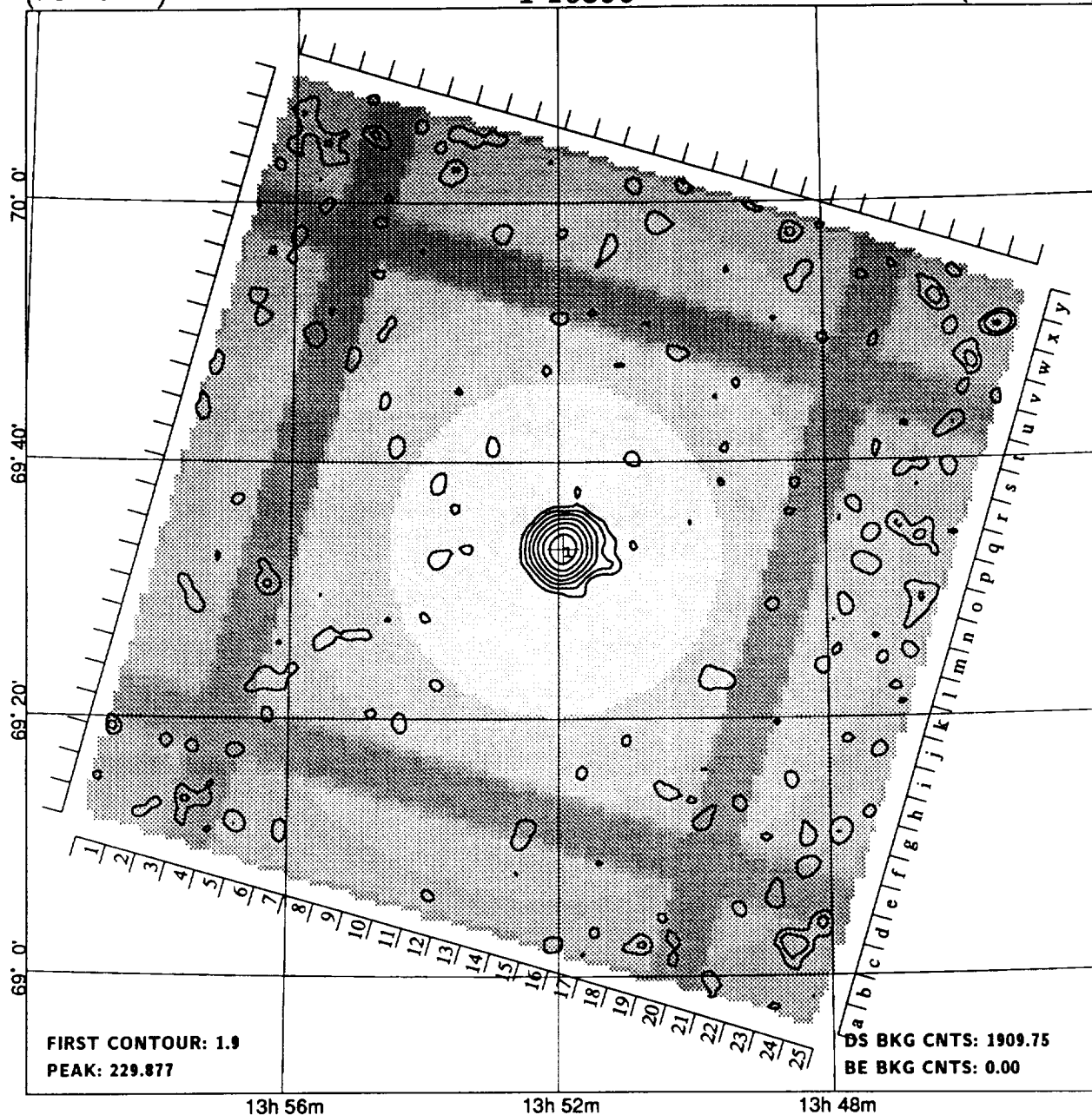
NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS:



(13h 51m)

I 10596

(13h 51m)



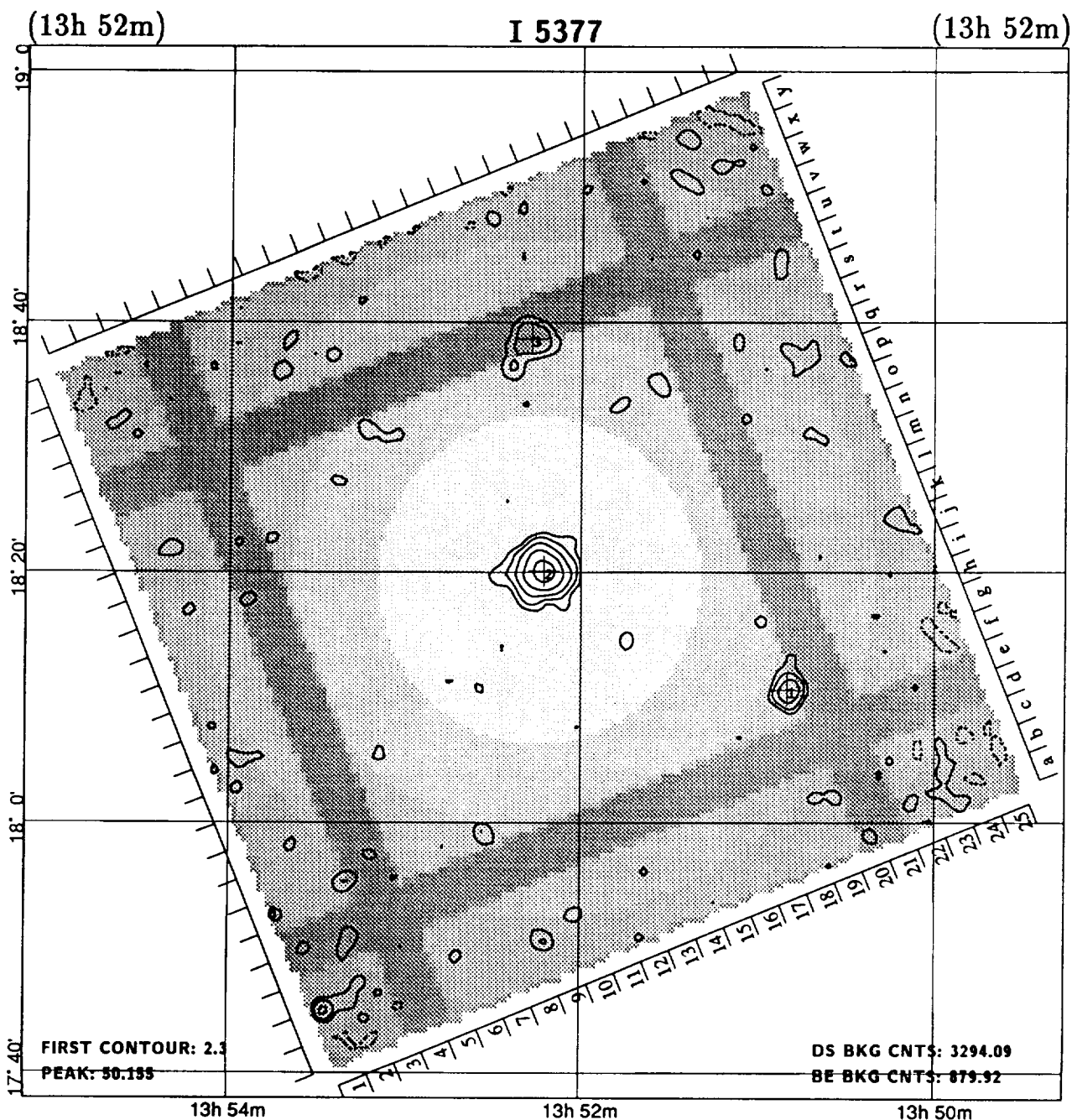
MK 279

FIELD CENTER:  $13^{\text{h}}51^{\text{m}}54.9^{\text{s}}$   $69^{\circ}33'13''$  (B1950)  
 $13^{\text{h}}53^{\text{m}}04.7^{\text{s}}$   $69^{\circ}18'29''$  (J2000)  
 $l: 115.04$   $b: 46.86$

DATE: 1981/ 40 - 1981/ 40  
 LIVETIME: 1547.5s  
 ROLL ANGLE:  $-73.9^{\circ}$

NH:  $1.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3147	1L	13 51 55.6	69 33 17	31	0.781	0.031	900.8	107.2	24.9	1.3	0	0.2		



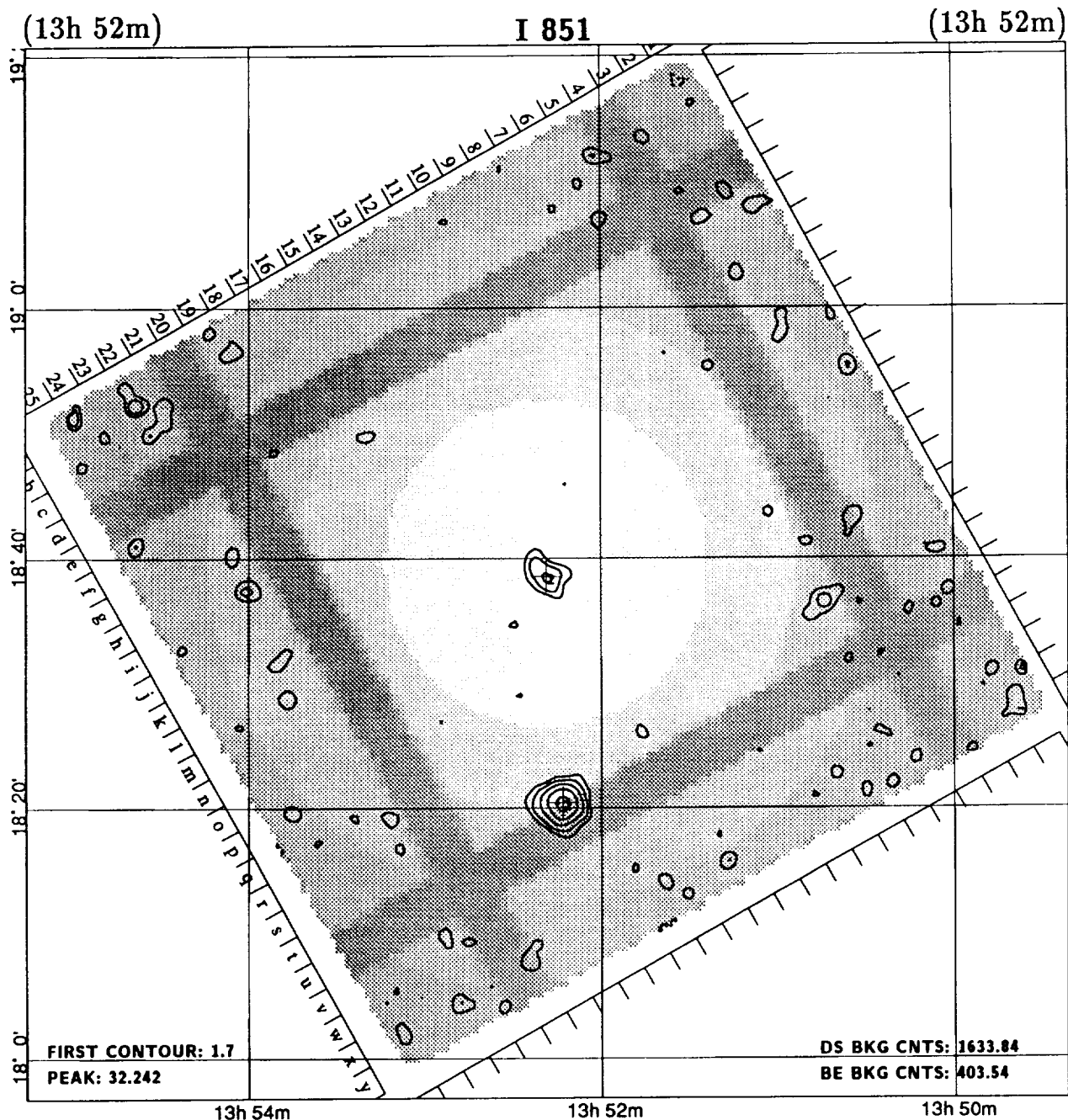
SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $13^h 52^m 12.6^s$   $18^\circ 19' 59''$  (B1950)  
 $13^h 54^m 35.9^s$   $18^\circ 05' 18''$  (J2000)  
 $l: 4.38$   $b: 72.87$

DATE: 1981/ 11 - 1981/ 11  
 LIVETIME: 2669.3s  
 ROLL ANGLE:  $-112.1^\circ$

NH:  $2.1E+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3145	1	13 50 49.6	18 10 38	50	*0.0278	0.0052	35.7	8.3	5.4	0.9	701	21.7	H	
3148	2	13 52 12.7	18 20 05	31	0.1193	0.0079	237.0	11.0	15.1	1.6	0	0.2	AH	AGN
3150	3	13 52 17.0	18 38 39	54	*0.0198	0.0042	27.6	6.4	4.7	1.4	1109	18.8	AH	S



ETA BOO STELLAR OBSERVATIONS, G STARS

FIELD CENTER:  $13^h 52^m 18.2^s$   $18^\circ 38' 50''$  (B1950)  
 $13^h 54^m 41.3^s$   $18^\circ 24' 09''$  (J2000)  
 $l: 5.30$   $b: 73.03$

DATE: 1979/180 - 1979/180  
 LIVETIME: 1323.9s  
 ROLL ANGLE:  $60.8^\circ$

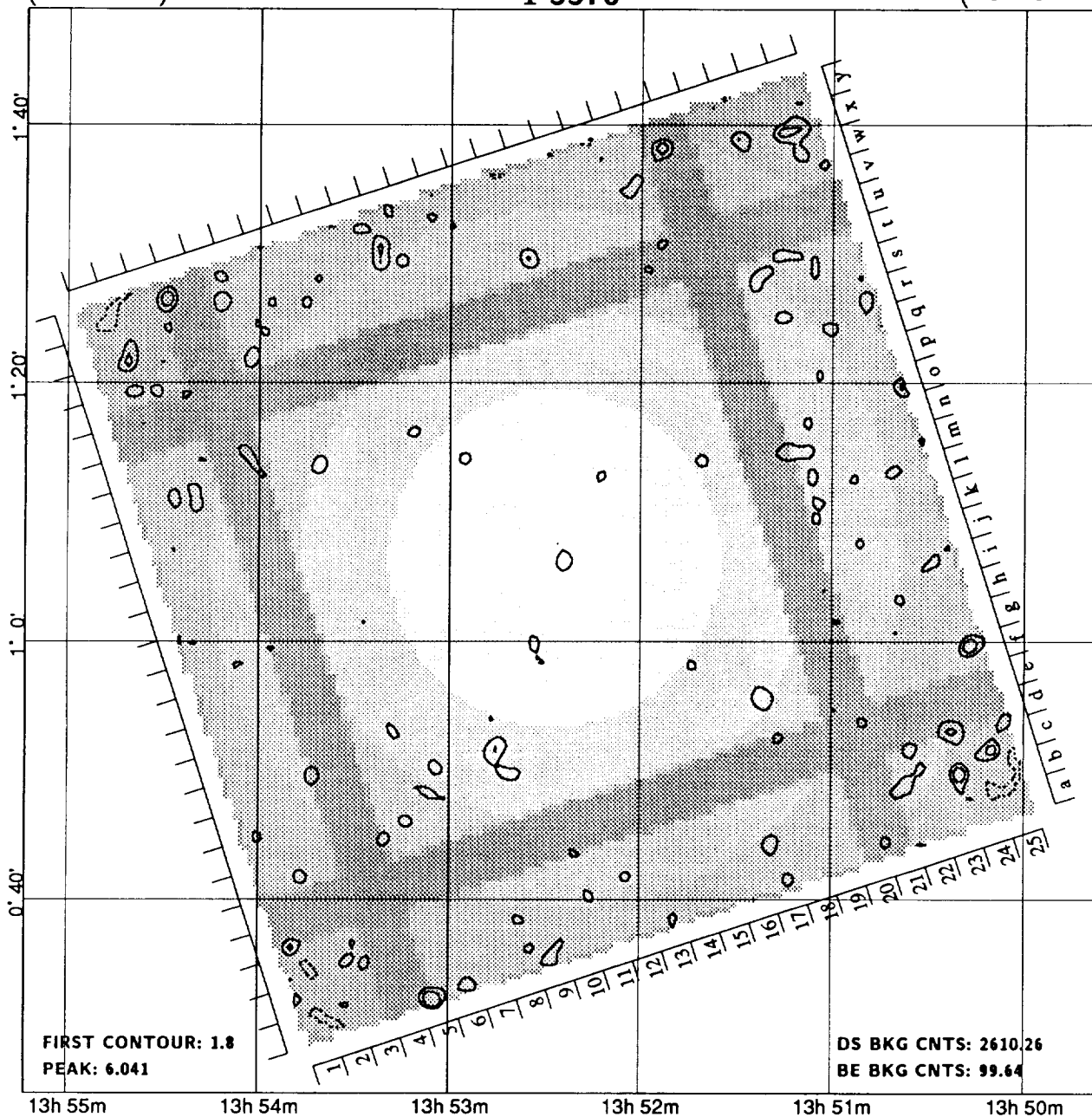
NH:  $2.1E+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3148	1	13 52 13.0	18 20 26	48	*0.127	0.014	88.5	3.5	9.2	1.2	906	18.8	AH	AGN
3150	2	13 52 18.7	18 38 35	36	0.0302	0.0060	29.8	5.2	5.0	1.0	0	0.4	AH	S

(13h 52m)

I 5378

(13h 52m)



## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $13^{\text{h}}52^{\text{m}}25.3^{\text{s}}$   $01^{\circ}06'55''$  (B1950)  
 $13^{\text{h}}54^{\text{m}}58.5^{\text{s}}$   $00^{\circ}52'14''$  (J2000)  
 $l: 335.71$   $b: 59.64$

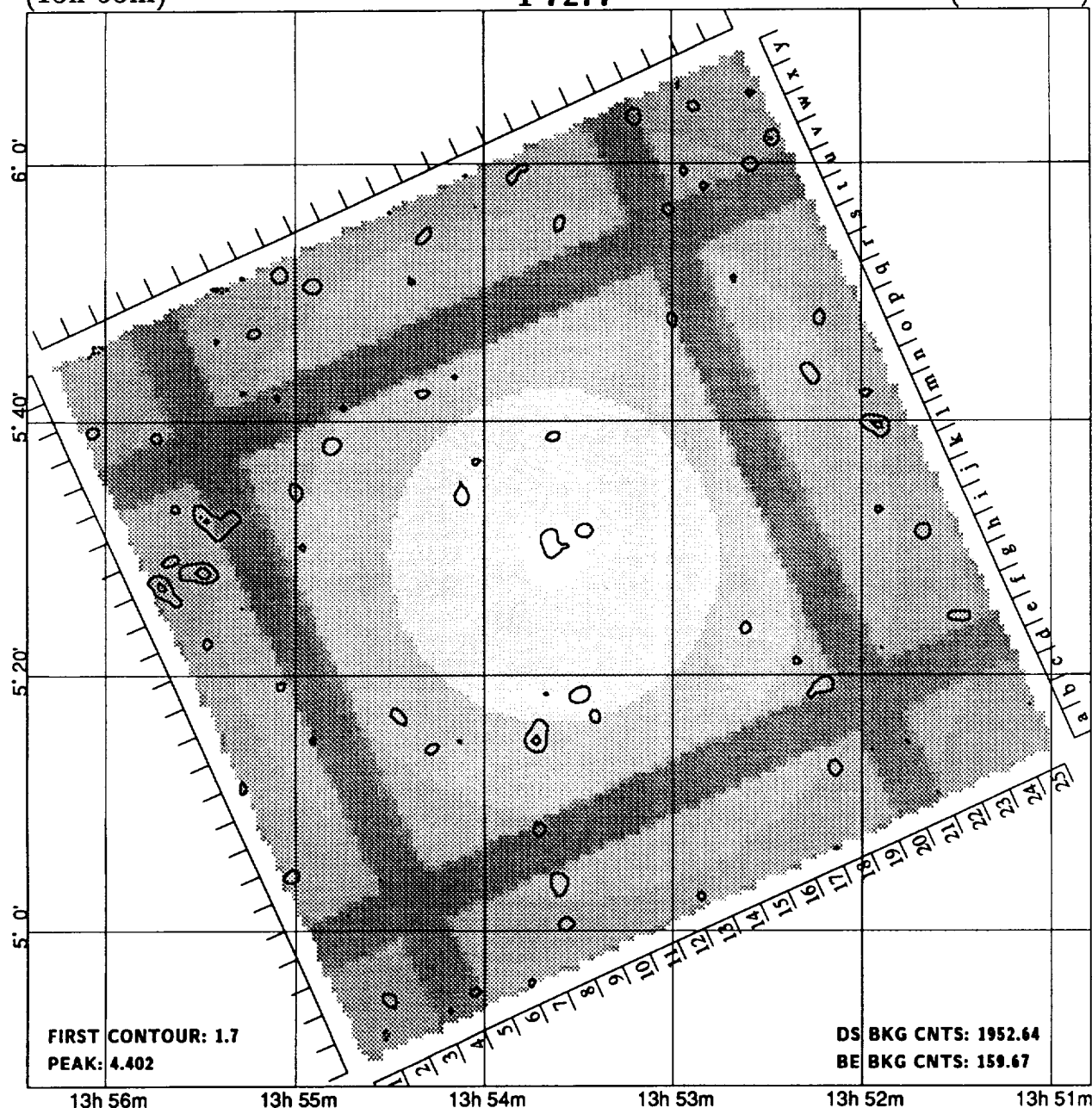
DATE: 1981/ 30 - 1981/ 30  
 LIVETIME: 2115.2s  
 ROLL ANGLE:  $-108.0^{\circ}$

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 53m)

I 7277

(13h 53m)



N5363, PECULIAR GALAXY

FIELD CENTER:  $13^{\text{h}}53^{\text{m}}36.1^{\text{s}}$   $05^{\circ}29'59''$  (B1950)  
 $13^{\text{h}}56^{\text{m}}06.8^{\text{s}}$   $05^{\circ}15'21''$  (J2000)  
 $l: 340.96$   $b: 63.25$

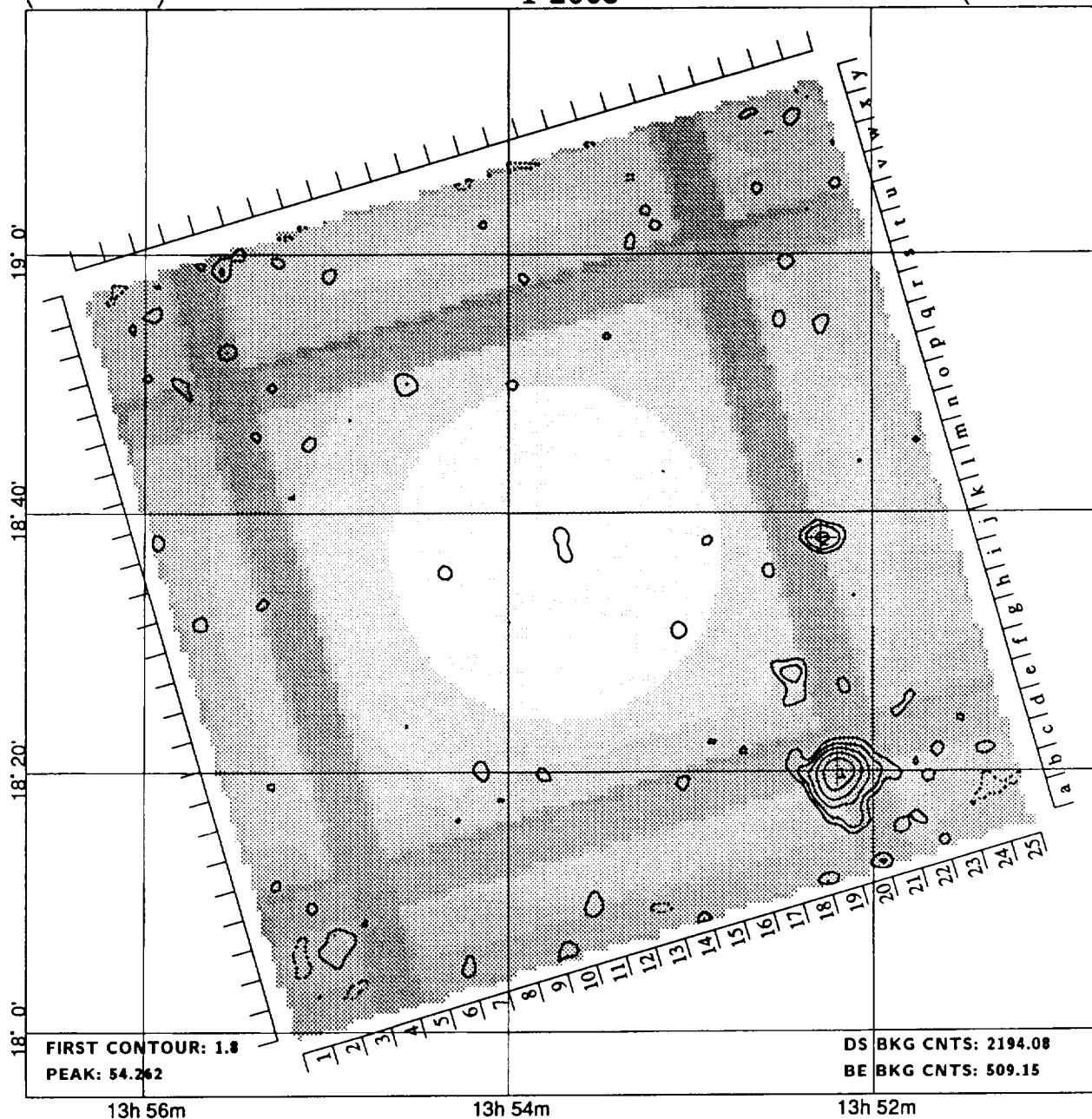
DATE: 1981/ 4 - 1981/ 4  
 LIVETIME: 1582.3s  
 ROLL ANGLE:  $-114.4^{\circ}$

NH:  $2.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 53m)

I 2665

(13h 53m)



## SEYFERT GALAXY SURVEY: MKN 463

FIELD CENTER:  $13^{\text{h}}53^{\text{m}}42.0^{\text{s}}$   $18^{\circ}36'59''$  (B1950)  
 $13^{\text{h}}56^{\text{m}}05.0^{\text{s}}$   $18^{\circ}22'21''$  (J2000)  
 $l: 5.84$   $b: 72.74$

DATE: 1979/ 24 - 1979/ 24  
 LIVETIME: 1777.9s  
 ROLL ANGLE:  $-106.3^{\circ}$

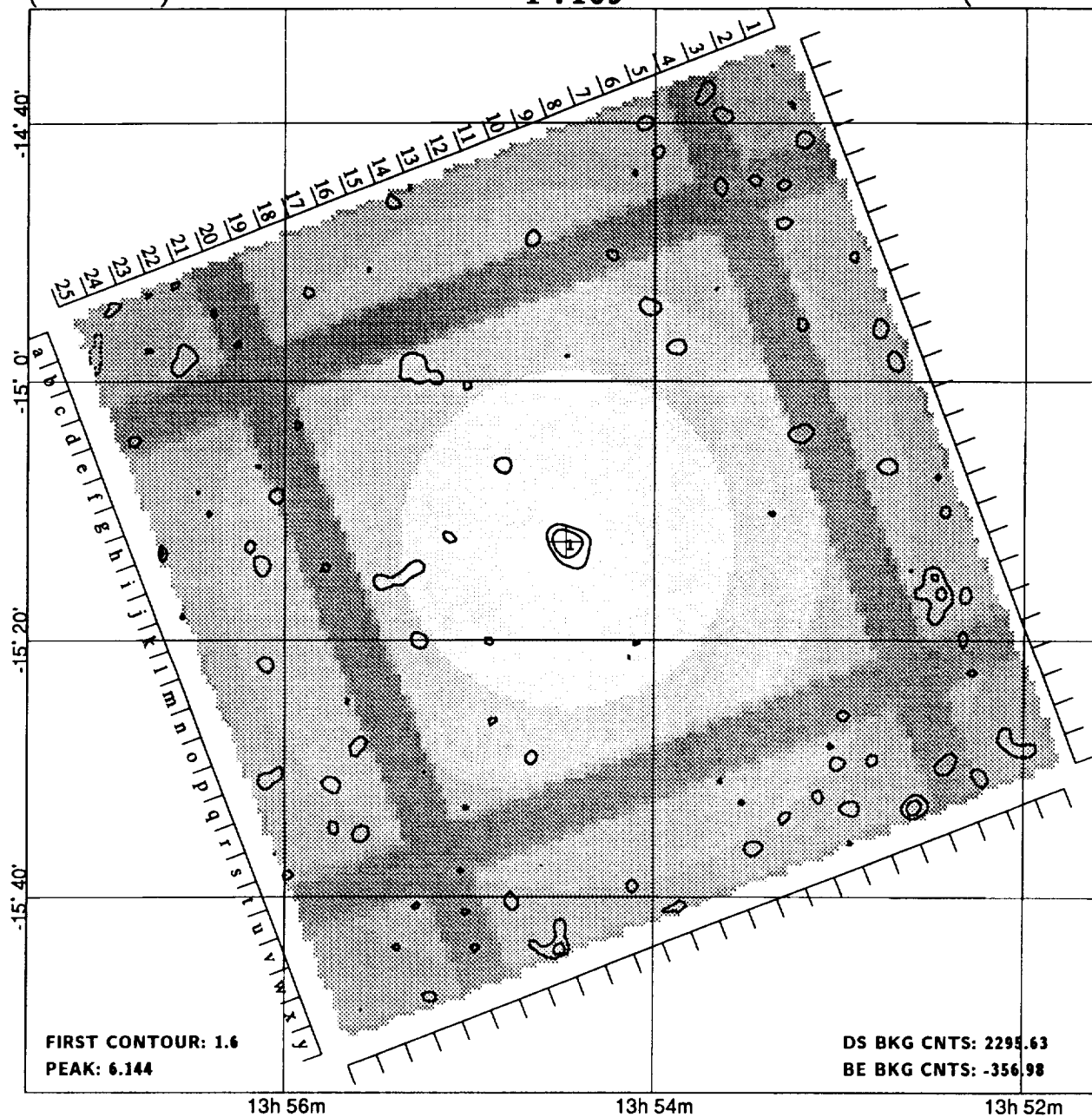
NH:  $2.2\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3148	1	13 52 11.6	18 20 01	48	*0.175	0.016	121.0	3.0	10.9	1.6	1309	27.1	AH	AGN
3150	2	13 52 16.9	18 38 03	52	*0.0259	0.0058	23.2	3.8	4.5	0.8	805	20.2	AH	S

(13h 54m)

I 7169

(13h 54m)



## 1354-15, BURSTING RADIO SOURCE

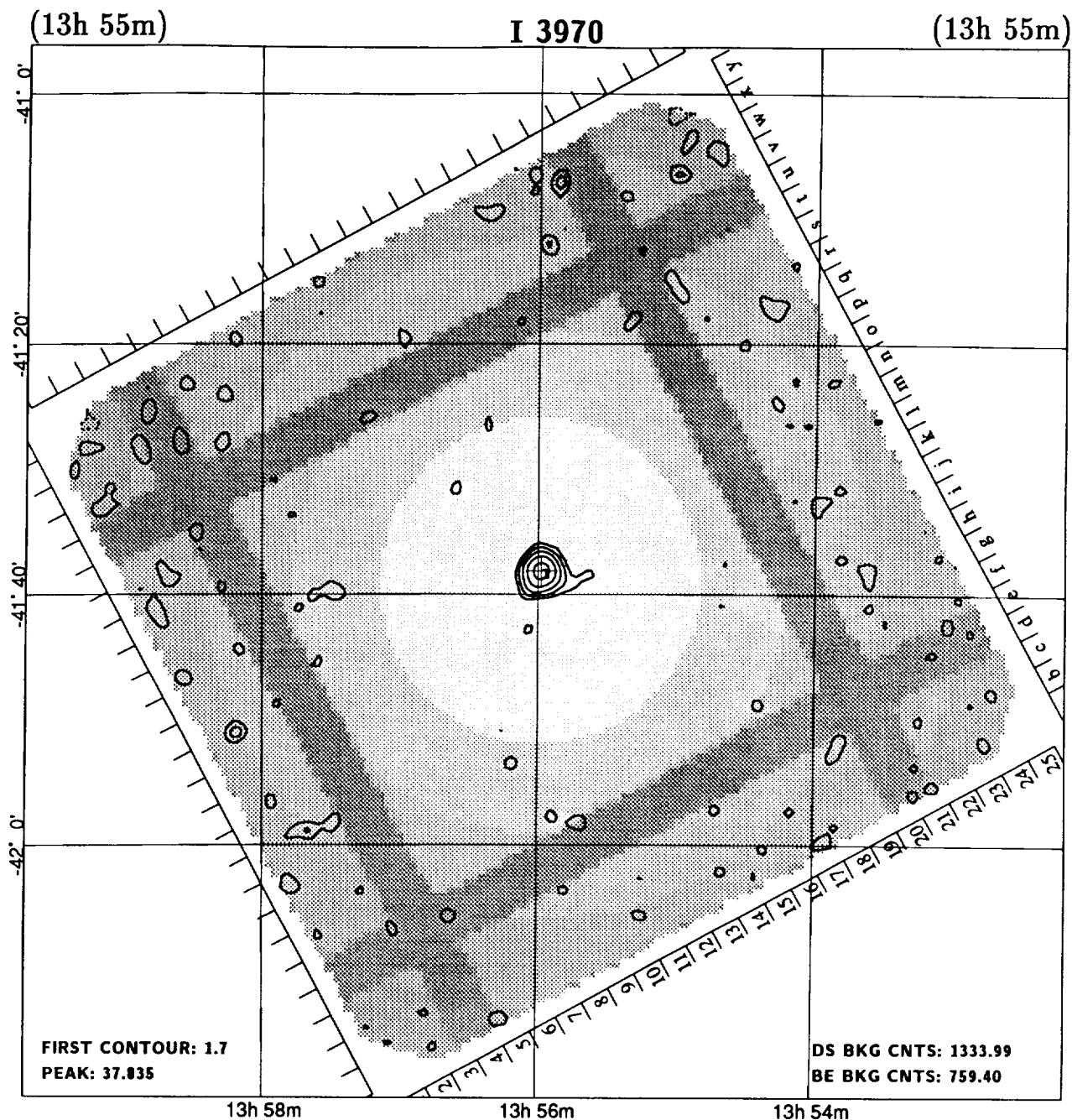
FIELD CENTER:  $13^h 54^m 29.0^s$   $-15^\circ 13' 11''$  (B1950)  
 $13^h 57^m 11.6^s$   $-15^\circ 27' 48''$  (J2000)  
 $l: 325.42$   $b: 44.52$

DATE: 1980/216 - 1980/216  
 LIVETIME: 1860.2s  
 ROLL ANGLE:  $68.9^\circ$

NH:  $7.7E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3151	1	13 54 28.8	-15 12 25	36	0.0183	0.0039	25.4	4.6	4.6	1.0	0	0.7	





1355-416, BRIGHT NEARBY QUASAR

FIELD CENTER:  $13^h 55^m 57.3^s$   $-41^\circ 38' 18''$  (B1950)  
 $13^h 59^m 00.3^s$   $-41^\circ 52' 52''$  (J2000)  
 $l: 316.18$   $b: 19.25$

DATE: 1980/ 44 - 1980/ 44  
 LIVETIME: 1081.0s  
 ROLL ANGLE:  $-118.5^\circ$

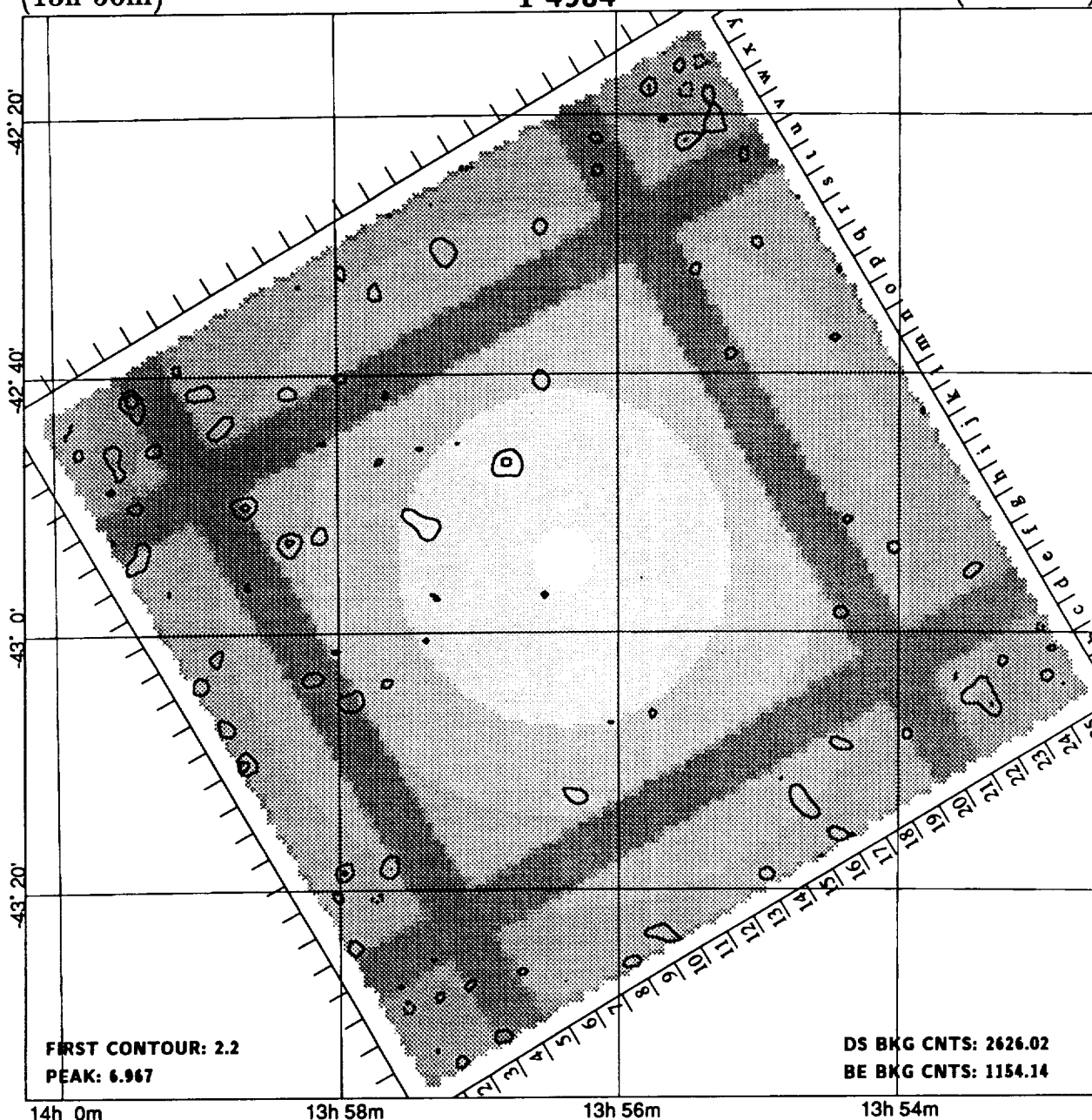
NH:  $5.5E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3152	1L	13 55 58.6	-41 38 07	31	0.169	0.017	136.0	9.0	10.0	1.1	0	0.4		

(13h 56m)

I 4984

(13h 56m)



CEN BRIGHT PATCH #1

FIELD CENTER:  $13^{\text{h}}56^{\text{m}}24.0^{\text{s}}$   $-42^{\circ}53'59''$  (B1950)  
 $13^{\text{h}}59^{\text{m}}28.4^{\text{s}}$   $-43^{\circ}08'32''$  (J2000)  
 $l: 315.90$   $b: 18.01$

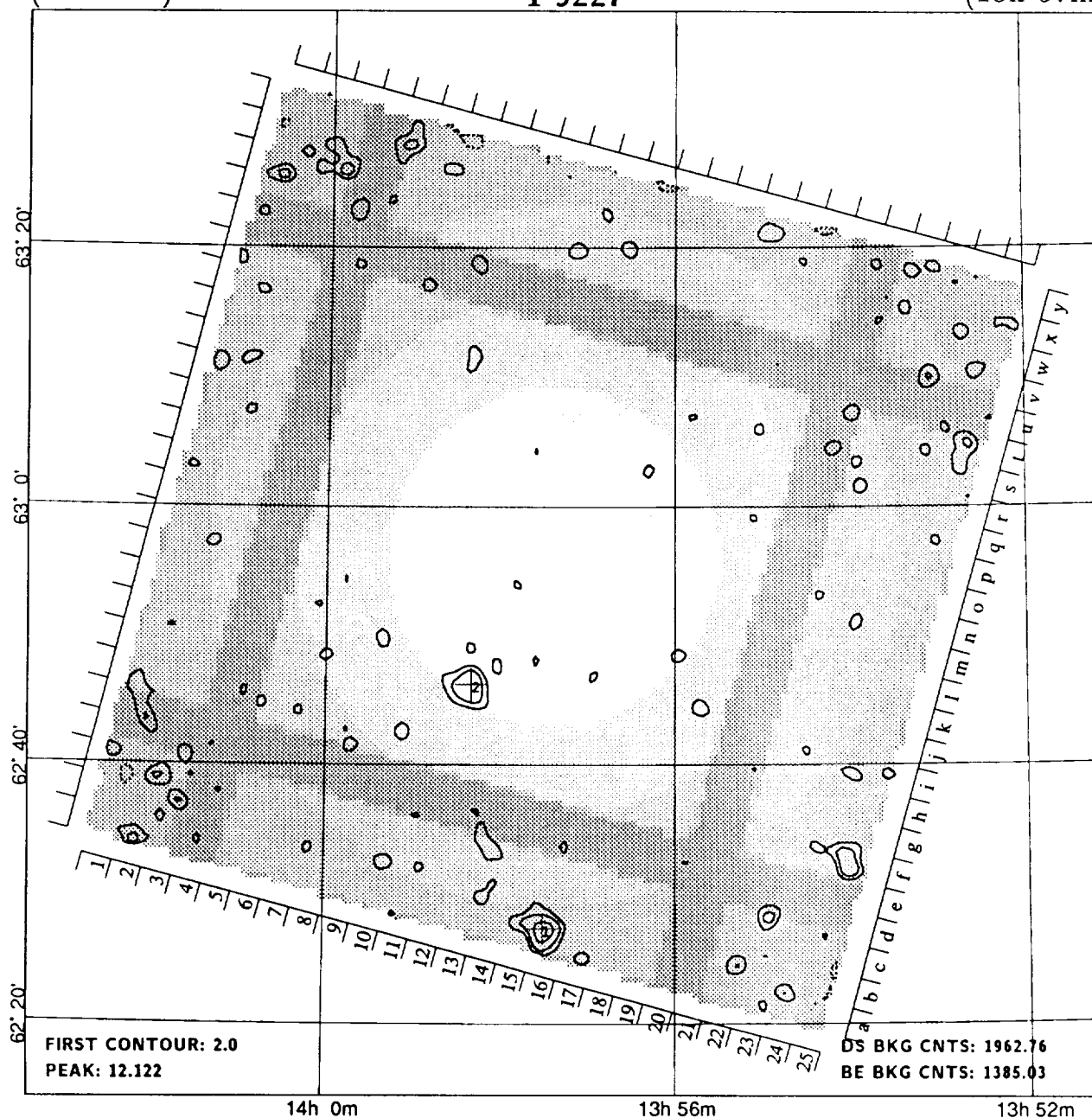
DATE: 1980/ 47 - 1980/ 47  
LIVETIME: 2128.0s  
ROLL ANGLE:  $-120.4^{\circ}$

NH:  $7.5\text{E}+20$   
REF/ID:  
FIELD FLAGS: L

(13h 57m)

I 9227

(13h 57m)



FIELD CENTER:  $13^h 57^m 16.8^s$   $62^\circ 56' 23''$  (B1950)  
 $13^h 58^m 46.5^s$   $62^\circ 41' 51''$  (J2000)  
 $l: 110.26$   $b: 52.74$

DATE: 1981/ 40 - 1981/ 40  
 LIVETIME: 1590.5s  
 ROLL ANGLE:  $-75.1^\circ$

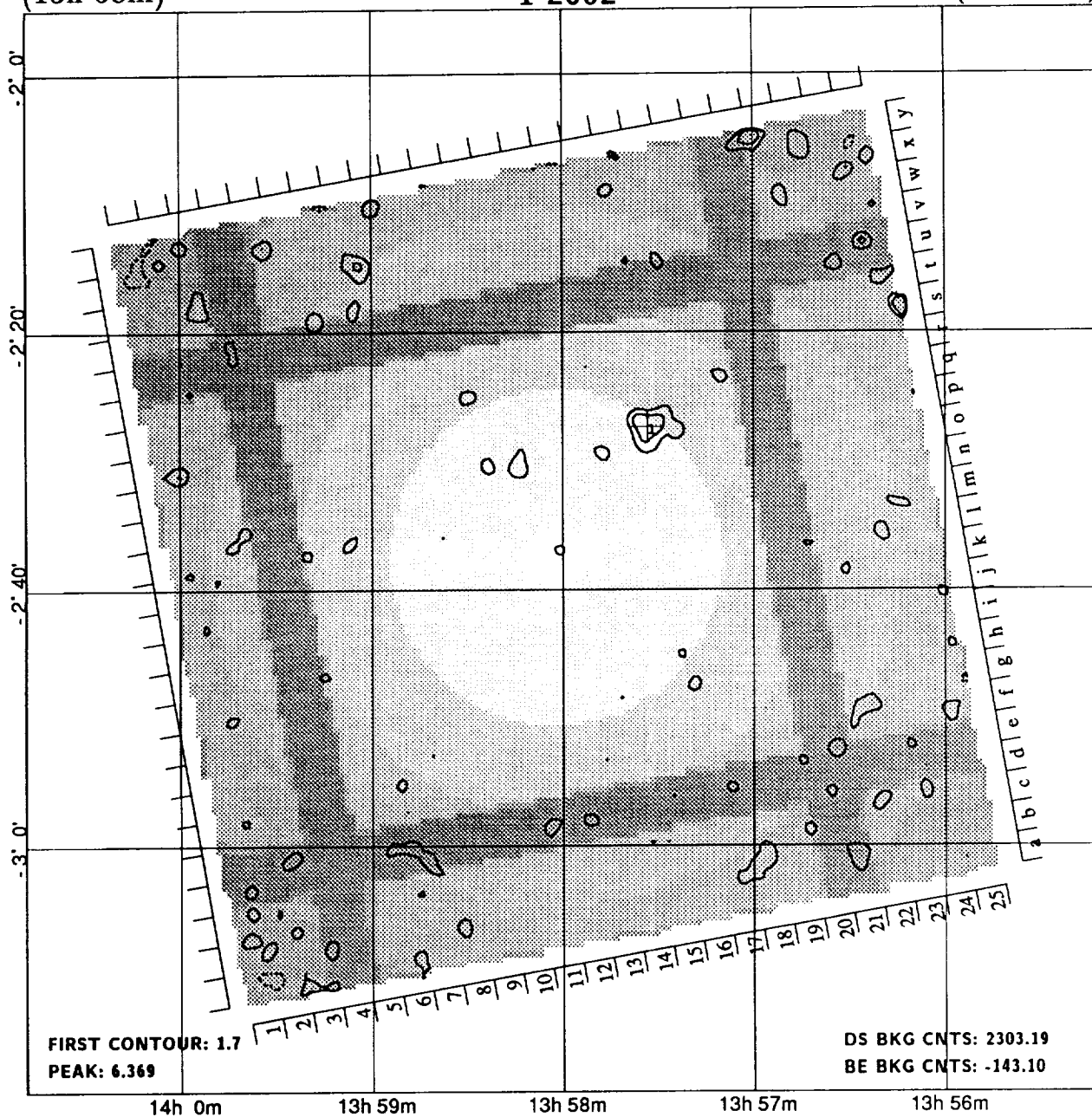
NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3154	1	13 57 30.3	62 27 17	52	0.0345	0.0087	20.2	5.8	4.0	1.0	100	29.0	AH
3157	2	13 58 20.0	62 46 14	42	0.0283	0.0059	28.9	8.1	4.8	1.0	0	12.2	AH

(13h 58m)

I 2602

(13h 58m)

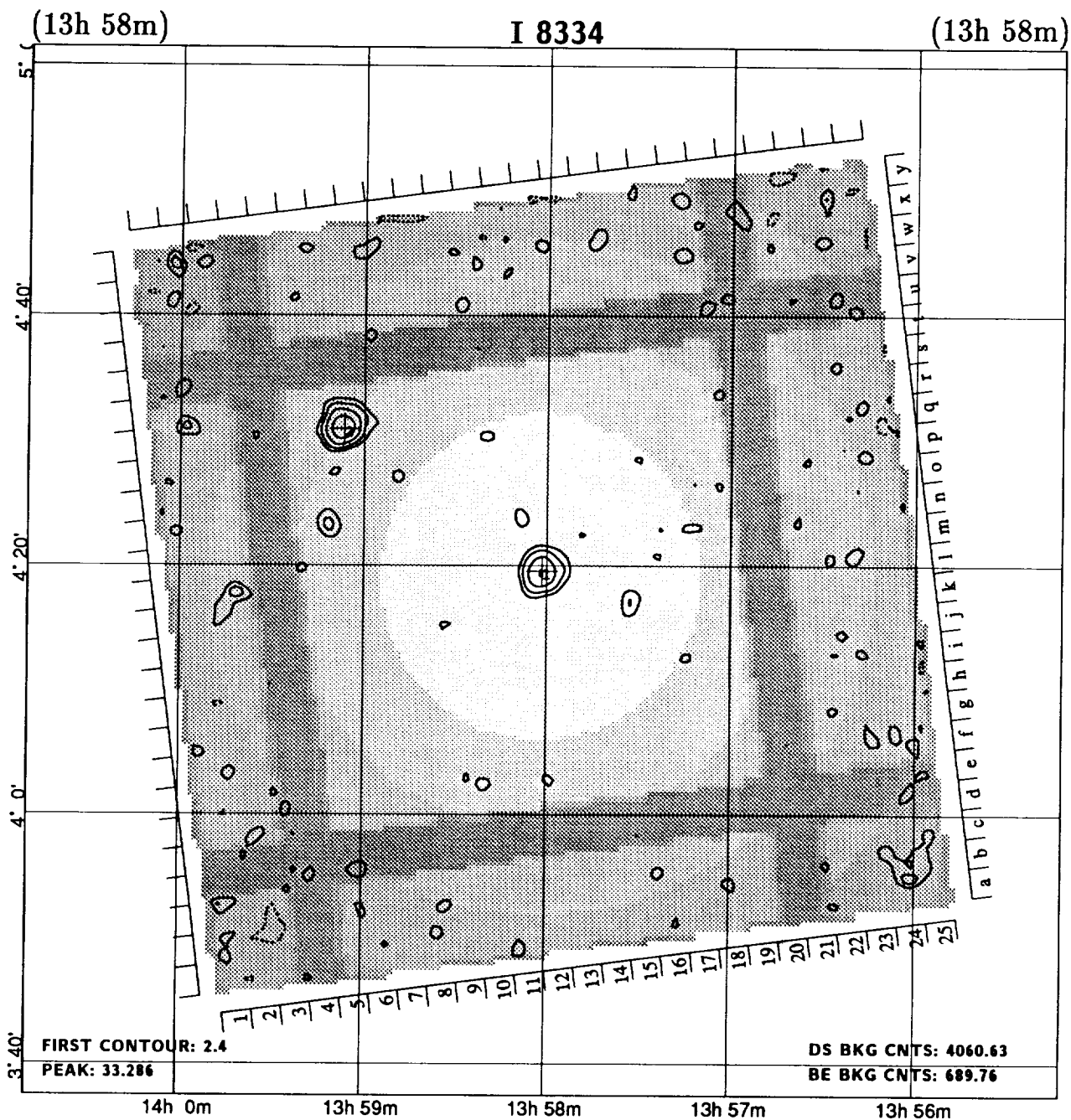


FIELD CENTER:  $13^h 58^m 00.0^s$   $-02^\circ 36' 59''$  (B1950)  
 $14^h 00^m 35.3^s$   $-02^\circ 51' 29''$  (J2000)  
 $l: 334.70$   $b: 55.69$

DATE: 1979/ 23 - 1979/ 23  
 LIVETIME: 1866.3s  
 ROLL ANGLE:  $-100.0^\circ$

NH:  $3.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3153	1	13 57 33.2	-02 27 23	43	0.0203	0.0046	23.9	5.1	4.4	1.2	0	12.0	H	AGN



PG 1358+04, LOW & INTERMEDIATE REDSHIFT QSO'S W/F<sub>ell</sub> EMISSION

FIELD CENTER: 13<sup>h</sup>58<sup>m</sup>01.0<sup>s</sup> 04°19'26" (B1950)  
14<sup>h</sup>00<sup>m</sup>32.3<sup>s</sup> 04°04'57" (J2000)  
 $l$ : 341.54  $b$ : 61.66

DATE: 1981/ 29 - 1981/ 29  
LIVETIME: 3290.4s  
ROLL ANGLE: -97.3°

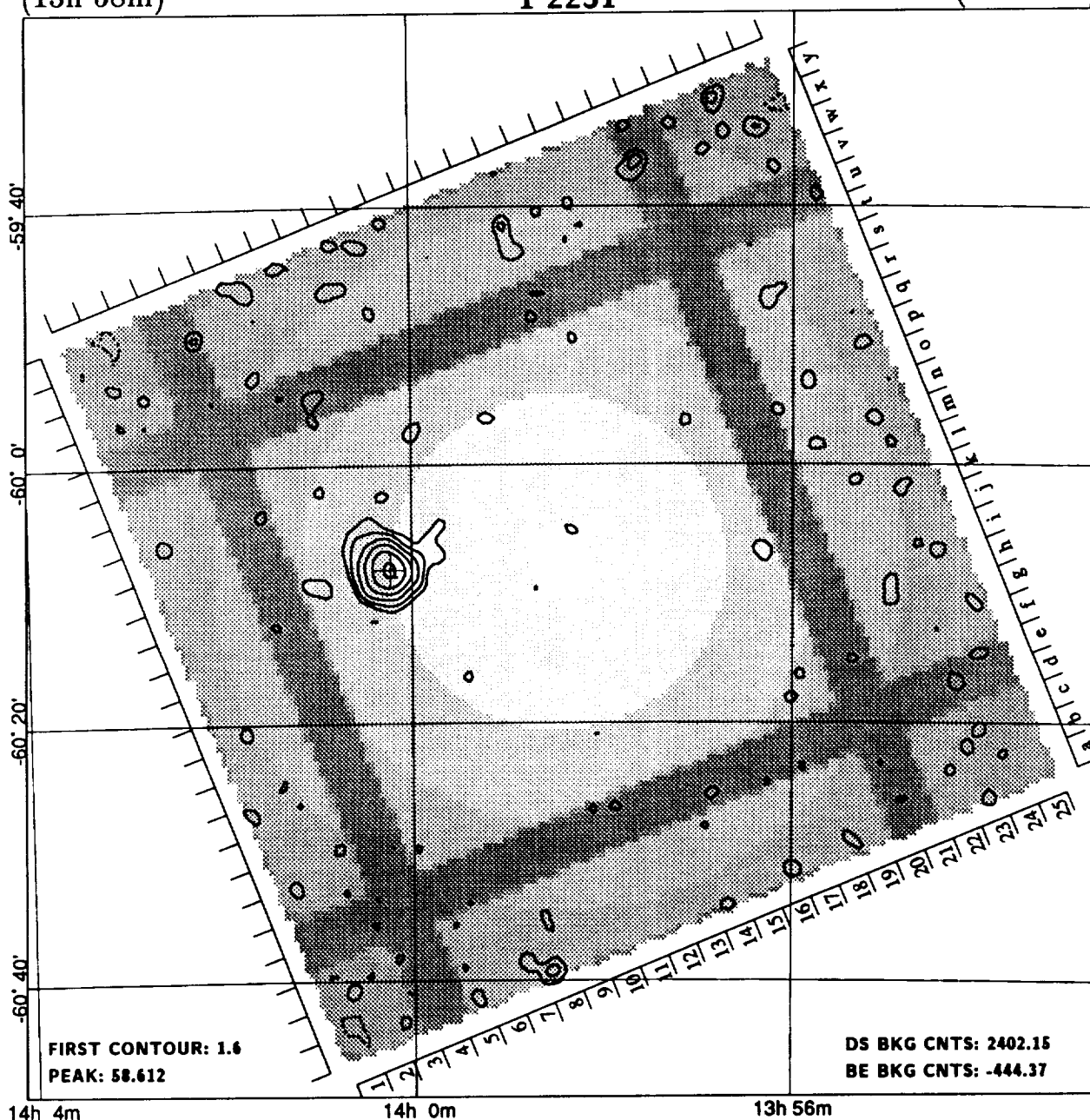
NH: 2.2E+20  
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3155	1	13 58 01.5	04 19 33	32	0.0327	0.0039	80.3	11.7	8.4	1.1	0	0.2	H	
3160	2	13 59 06.6	04 30 51	48	0.0525	0.0059	88.1	8.9	8.9	1.1	0	20.1	H	

(13h 58m)

I 2231

(13h 58m)



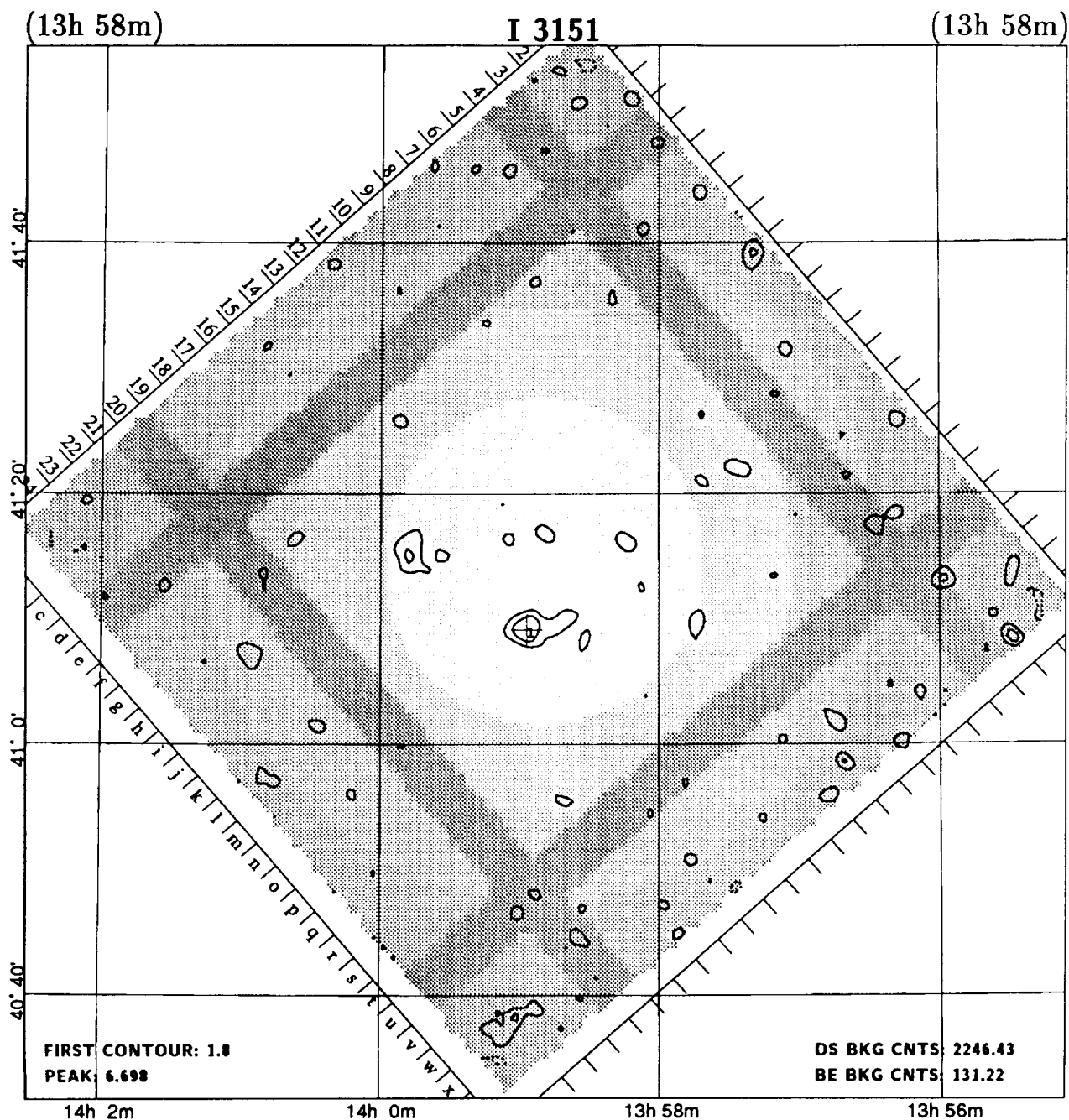
## STELLAR SURVEY-EARLY TYPE STARS: HD122451=BETA CEN A

FIELD CENTER:  $13^{\text{h}}58^{\text{m}}24.0^{\text{s}}$   $-60^{\circ}06'59''$  (B1950)  
 $14^{\text{h}}01^{\text{m}}56.2^{\text{s}}$   $-60^{\circ}21'27''$  (J2000)  
 $l: 311.55$   $b: 1.33$

DATE: 1979/ 33 - 1979/ 33  
 LIVETIME: 1946.5s  
 ROLL ANGLE:  $-111.0^{\circ}$

NH:  $1.6\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3163	1	14 00 13.6	-60 08 02	38	0.178	0.012	214.6	4.4	14.5	1.5	0	13.8	H	S



FIELD CENTER:  $13^{\text{h}}58^{\text{m}}49.3^{\text{s}}$   $41^{\circ}13'43''$  (B1950)  
 $14^{\text{h}}00^{\text{m}}53.9^{\text{s}}$   $40^{\circ}59'15''$  (J2000)  
 $\ell$ : 81.50  $b$ : 70.10

DATE: 1979/167 - 1979/167  
 LIVETIME: 1820.4s  
 ROLL ANGLE: 48.9°

NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

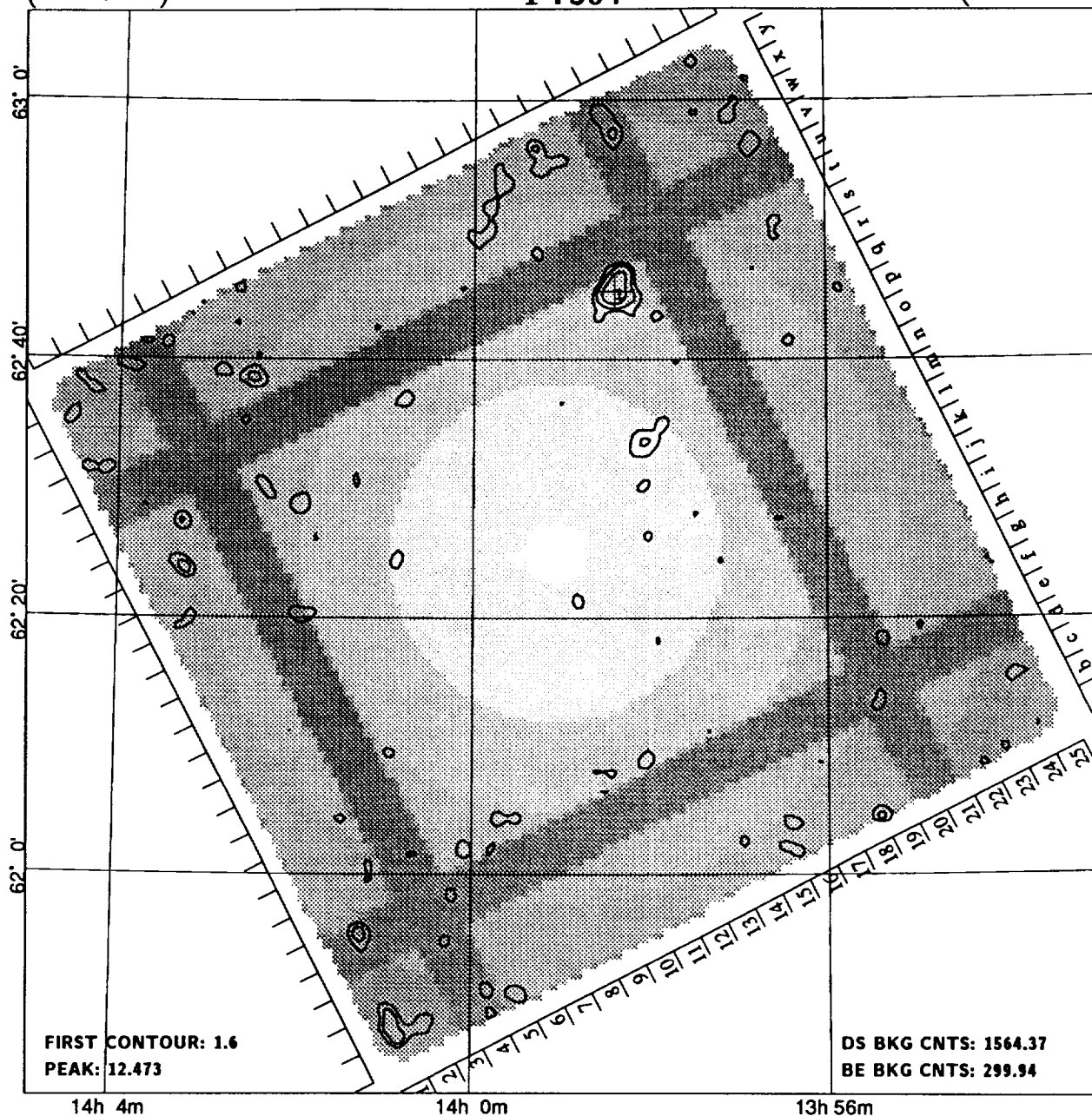
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3159	1	13 58 56.9	41 09 09	36	0.0217	0.0044	28.1	4.9	4.9	1.2	0	4.9	H	



(13h 58m)

I 7304

(13h 58m)



## 1358+62, LOW FREQ. VAR. EXTRAGAL. RADIO SOURCE

FIELD CENTER:  $13^{\text{h}}58^{\text{m}}58.4^{\text{s}}$   $62^{\circ}25'07''$  (B1950)  
 $14^{\text{h}}00^{\text{m}}28.6^{\text{s}}$   $62^{\circ}10'39''$  (J2000)  
 $l: 109.59$   $b: 53.13$

DATE: 1980/ 1 - 1980/ 1  
 LIVETIME: 1267.7s  
 ROLL ANGLE:  $-117.2^{\circ}$

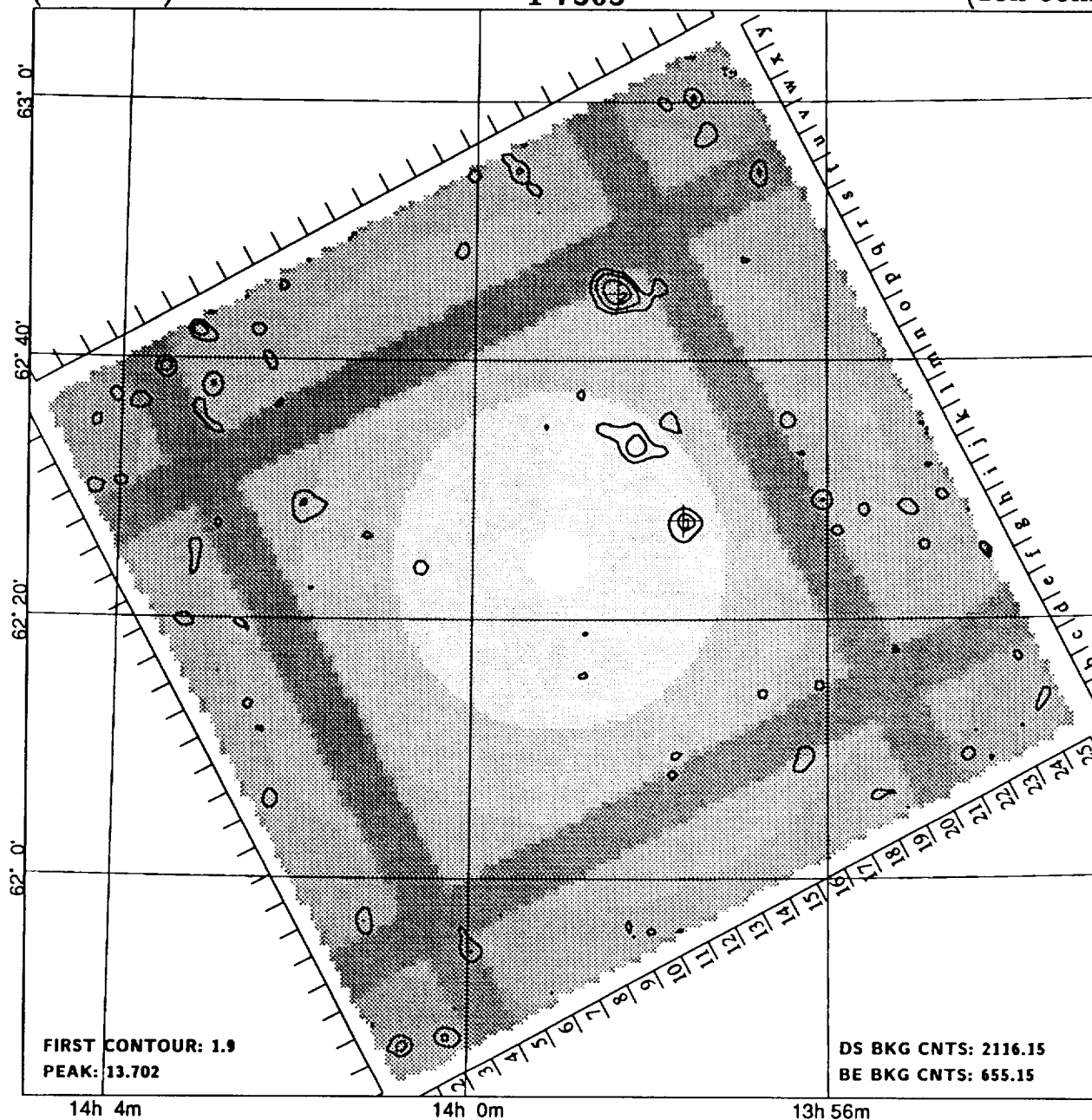
NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3157	1	13 58 24.1	62 45 14	51	*0.0561	0.0099	35.4	3.6	5.7	1.1	501	20.5	AH	

(13h 58m)

I 7305

(13h 58m)

**1358+62, LOW FREQ. VAR. EXTRAGAL. RADIO SOURCE**

**FIELD CENTER:**  $13^h 58^m 58.4^s$   $62^\circ 25' 07''$  (B1950)  
 $14^h 00^m 28.6^s$   $62^\circ 10' 39''$  (J2000)  
 $l: 109.59$   $b: 53.13$

**DATE:** 1980/356 - 1980/356  
**LIVETIME:** 1714.8s  
**ROLL ANGLE:**  $-118.2^\circ$

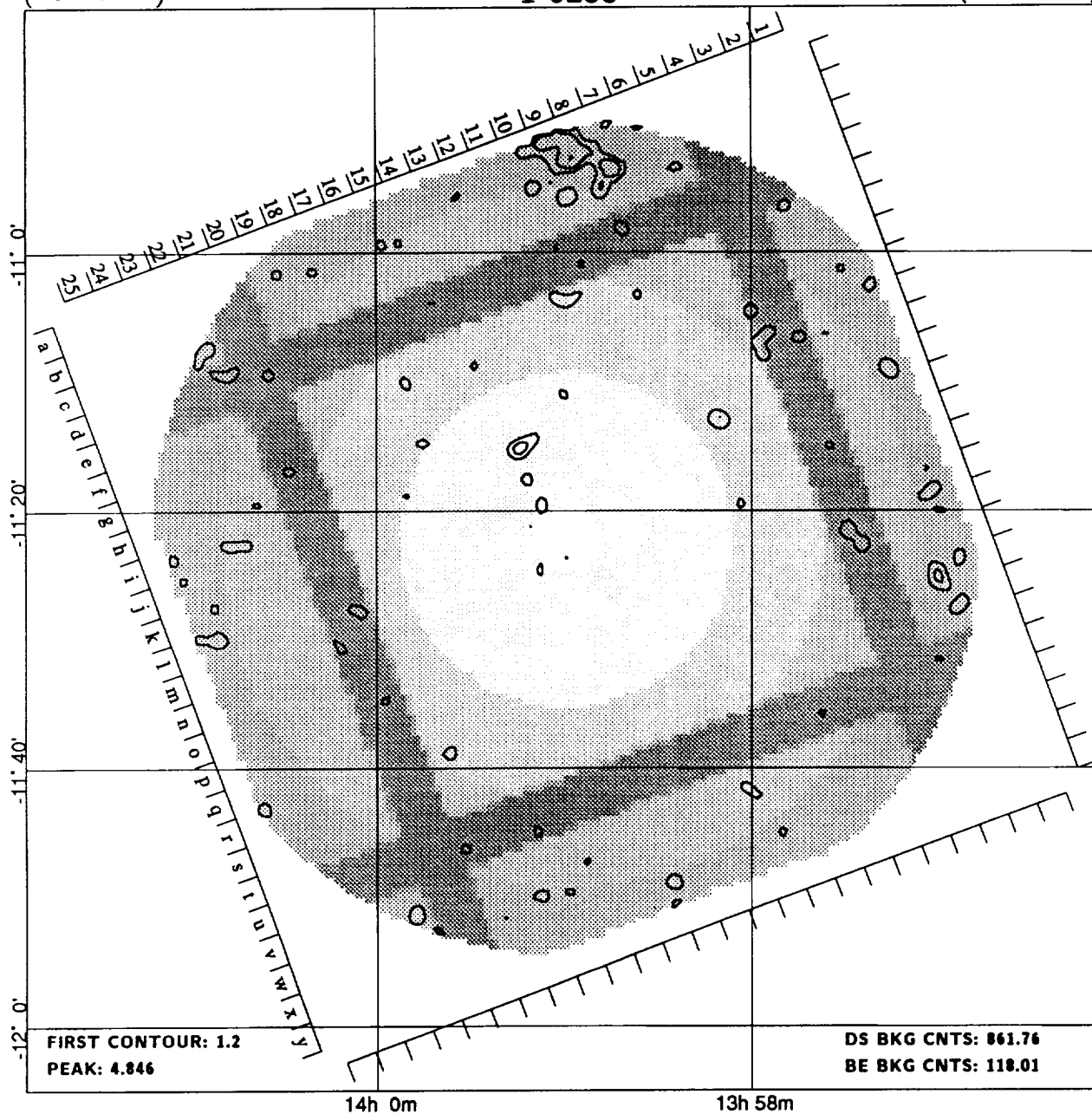
**NH:**  $2.0E+20$   
**REF/ID:**  
**FIELD FLAGS:** C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3154	1	13 57 37.1	62 27 39	46	0.0155	0.0043	17.7	6.3	3.6	0.8	0	9.5	AH
3157	2	13 58 22.5	62 45 12	51	*0.0419	0.0076	35.4	5.6	5.5	1.0	704	20.7	AH

(13h 59m)

I 6253

(13h 59m)



## A 1836, COMPLETE SURVEY OF ABELL CLUSTERS

FIELD CENTER:  $13^{\text{h}}59^{\text{m}}00.0^{\text{s}}$   $-11^{\circ}22'59''$  (B1950)  
 $14^{\text{h}}01^{\text{m}}40.6^{\text{s}}$   $-11^{\circ}37'27''$  (J2000)  
 $l: 328.96$   $b: 47.67$

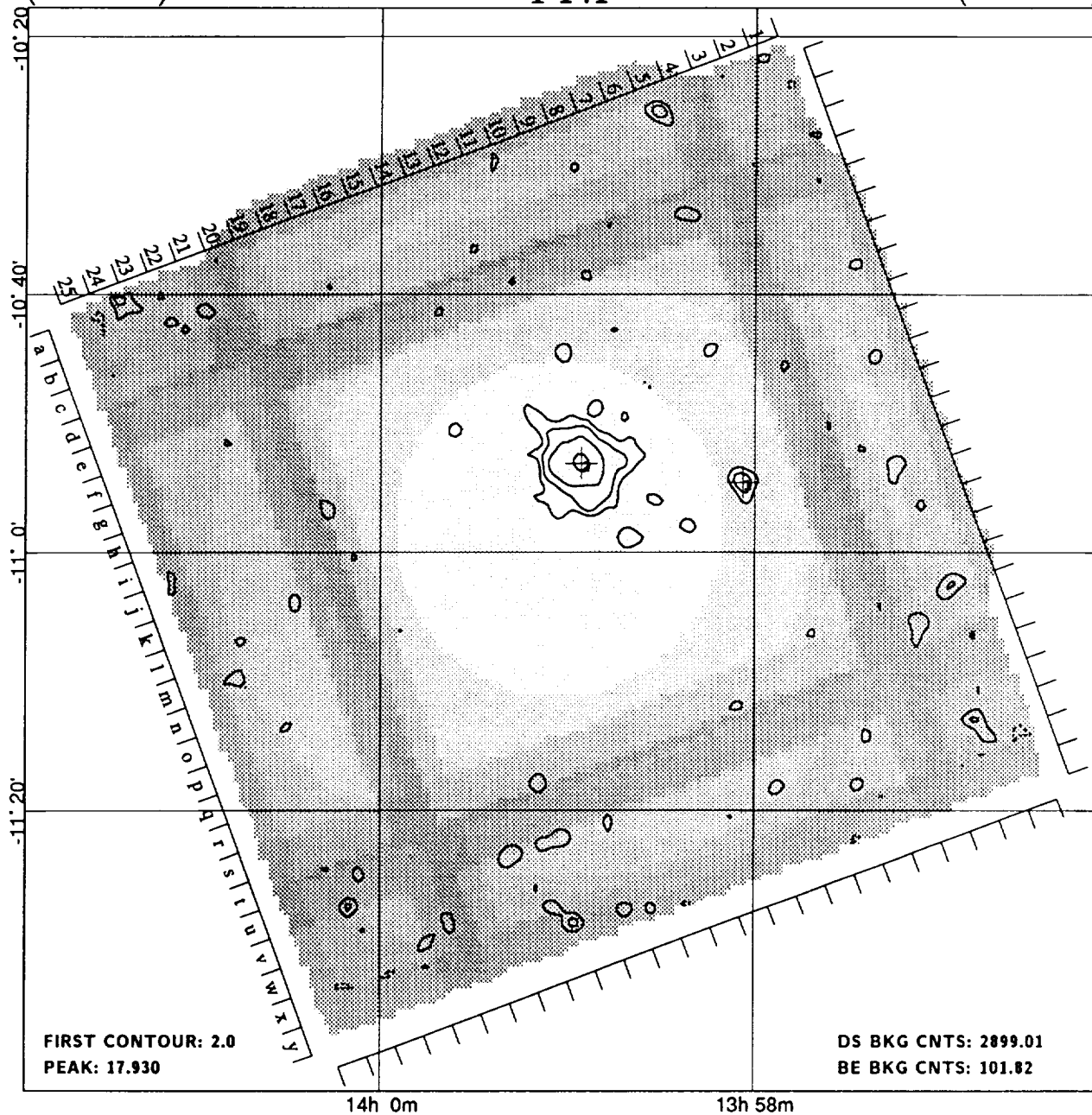
DATE: 1980/205 - 1980/205  
 LIVETIME: 698.3s  
 ROLL ANGLE:  $69.7^{\circ}$

NH:  $4.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(13h 59m)

I 141

(13h 59m)



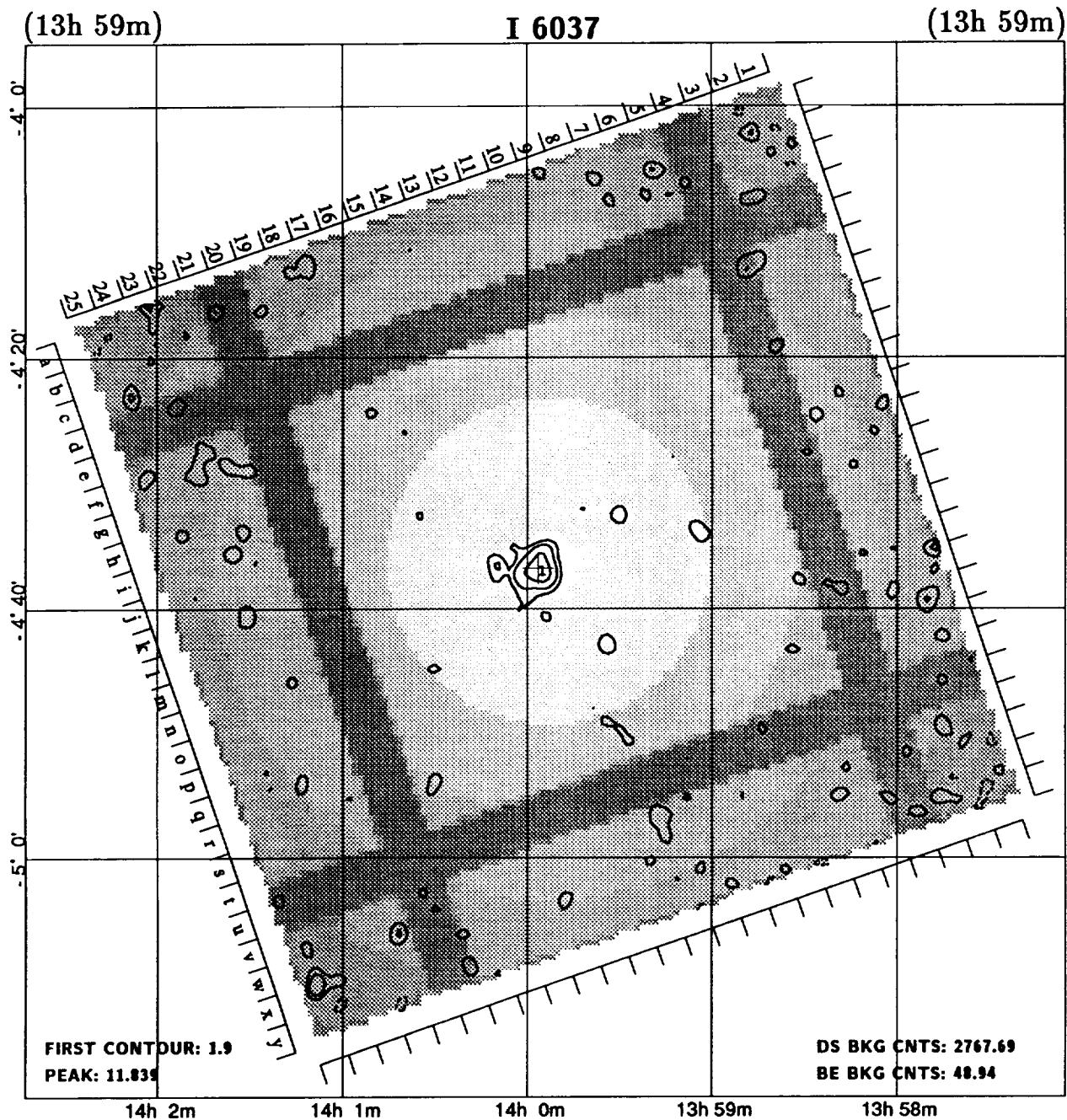
## A1837 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $13^{\text{h}}59^{\text{m}}02.4^{\text{s}}$   $-10^{\circ}59'47''$  (B1950)  
 $14^{\text{h}}01^{\text{m}}42.7^{\text{s}}$   $-11^{\circ}14'14''$  (J2000)  
 $l: 329.20$   $b: 48.02$

DATE: 1979/201 - 1979/204  
 LIVETIME: 2349.2s  
 ROLL ANGLE:  $69.7^{\circ}$

NH:  $4.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3156	1	13 58 03.7	-10 54 32	55	0.0120	0.0034	16.8	6.2	3.5	0.7	0	15.2	H	
3158	2	13 58 55.6	-10 53 03	38	0.0530	0.0058	89.4	7.6	9.1	2.7	0	7.0	H	



**A1839, RICH CLUSTERS WITH DOMINANT GALAXIES**

FIELD CENTER:  $13^{\text{h}}59^{\text{m}}54.0^{\text{s}}$   $-04^{\circ}36'59''$  (B1950)  
 $14^{\text{h}}02^{\text{m}}30.5^{\text{s}}$   $-04^{\circ}51'25''$  (J2000)  
 $l: 333.83$   $b: 53.70$

DATE: 1980/216 - 1980/216  
 LIVETIME: 2242.7s  
 ROLL ANGLE:  $71.1^{\circ}$

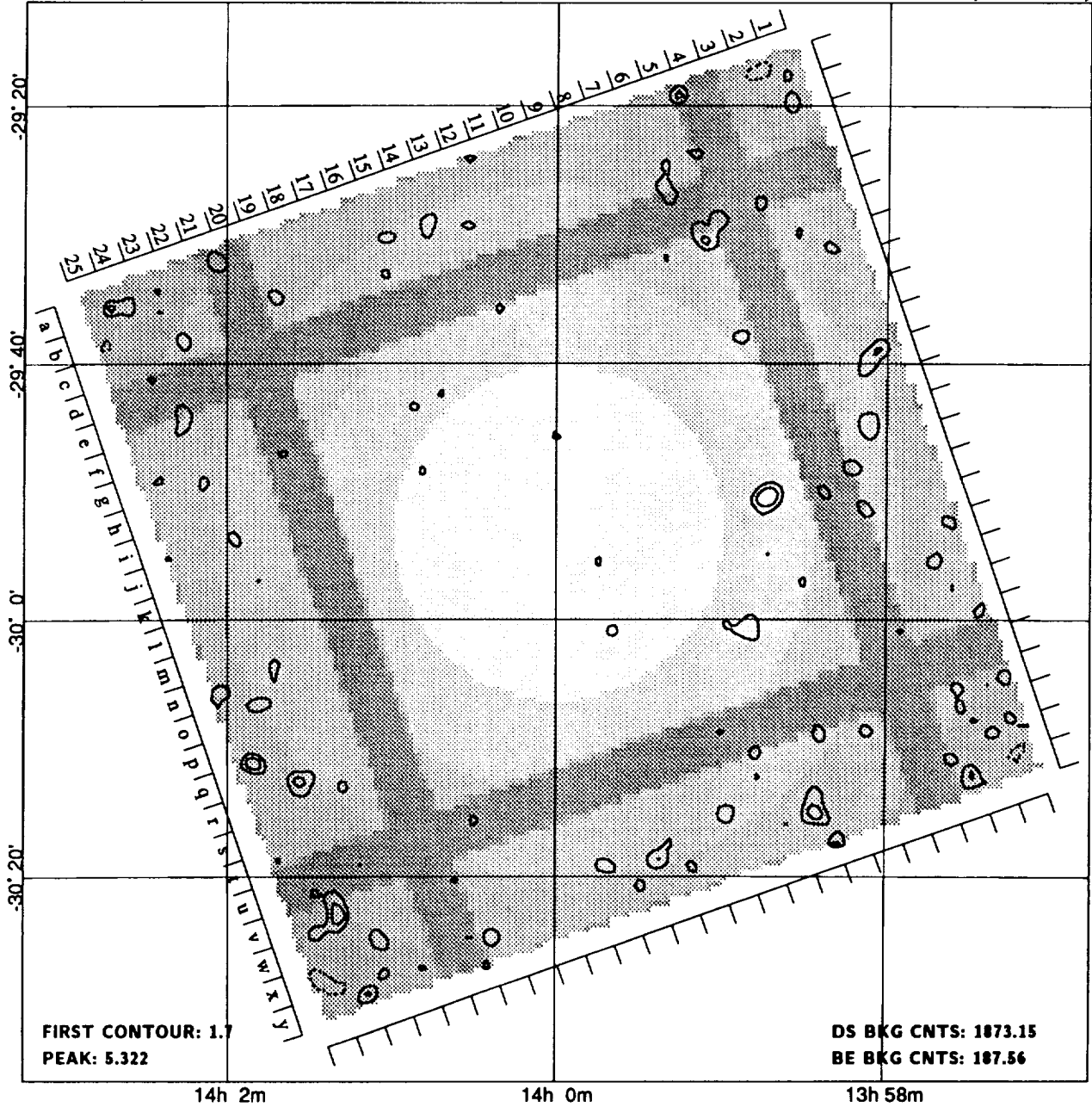
NH:  $2.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3162	1	13 59 56.5	-04 36 47	35	0.0310	0.0046	51.6	7.4	6.7	1.4	0	0.8	H	

(14h 0m)

I 433

(14h 0m)



## TOLOLO 41 ABNORMAL GALAXIES SURVEY

FIELD CENTER:  $14^{\text{h}}00^{\text{m}}00.0^{\text{s}}$   $-29^{\circ}53'59''$  (B1950)  
 $14^{\text{h}}02^{\text{m}}53.2^{\text{s}}$   $-30^{\circ}08'24''$  (J2000)  
 $l: 320.81$   $b: 30.24$

DATE: 1979/206 - 1979/206  
 LIVETIME: 1517.9s  
 ROLL ANGLE:  $70.8^{\circ}$

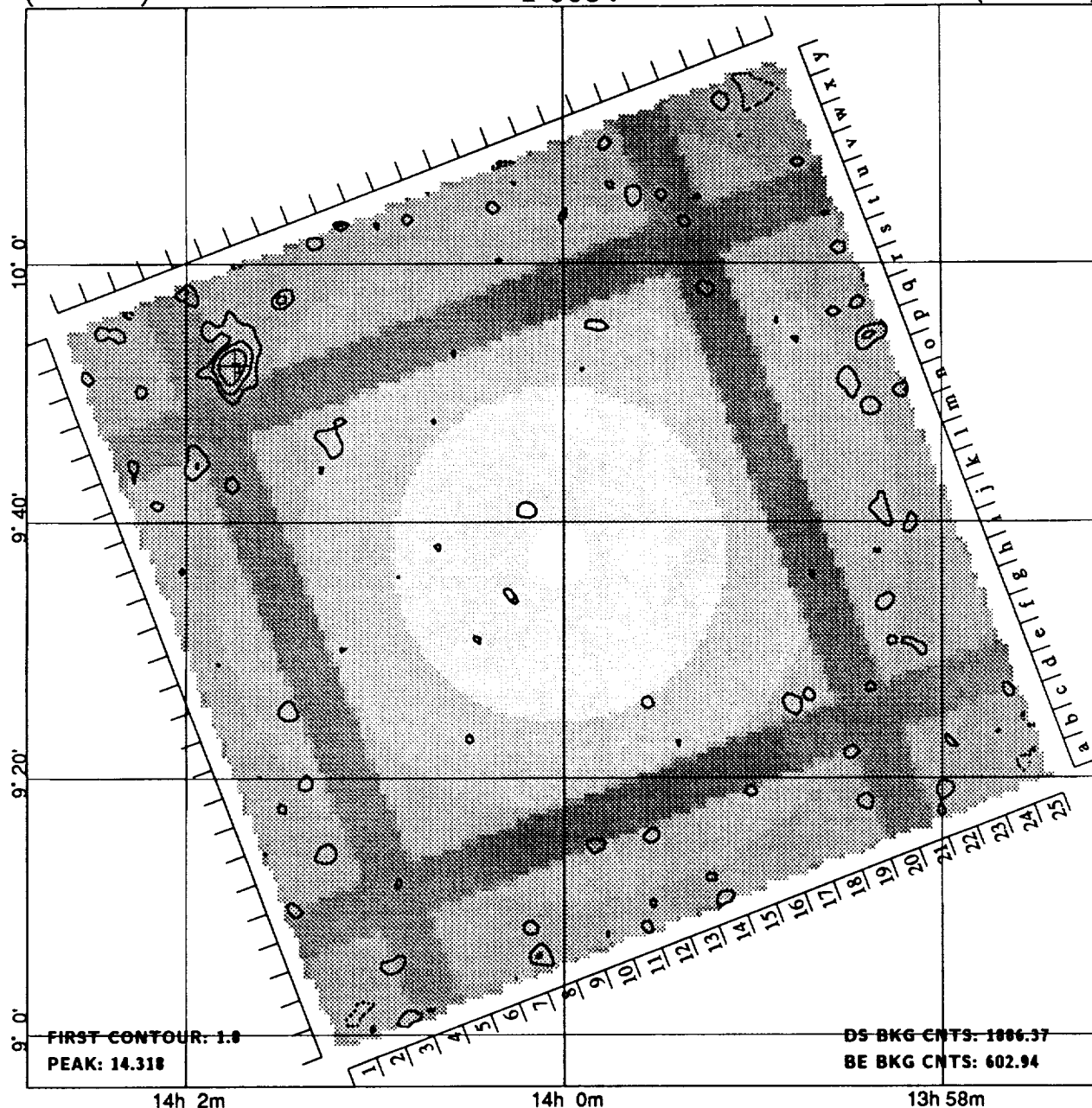
NH:  $4.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



(14h 0m)

I 6684

(14h 0m)



## GROUPS OF GALAXIES: TG 80

FIELD CENTER:  $14^{\text{h}}00^{\text{m}}00.0^{\text{s}}$   $09^{\circ}37'59''$  (B1950)  
 $14^{\text{h}}02^{\text{m}}28.1^{\text{s}}$   $09^{\circ}23'34''$  (J2000)  
 $l: 349.67$   $b: 65.59$

DATE: 1980/ 17 - 1980/ 17  
 LIVETIME: 1528.6s  
 ROLL ANGLE:  $-110.9^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

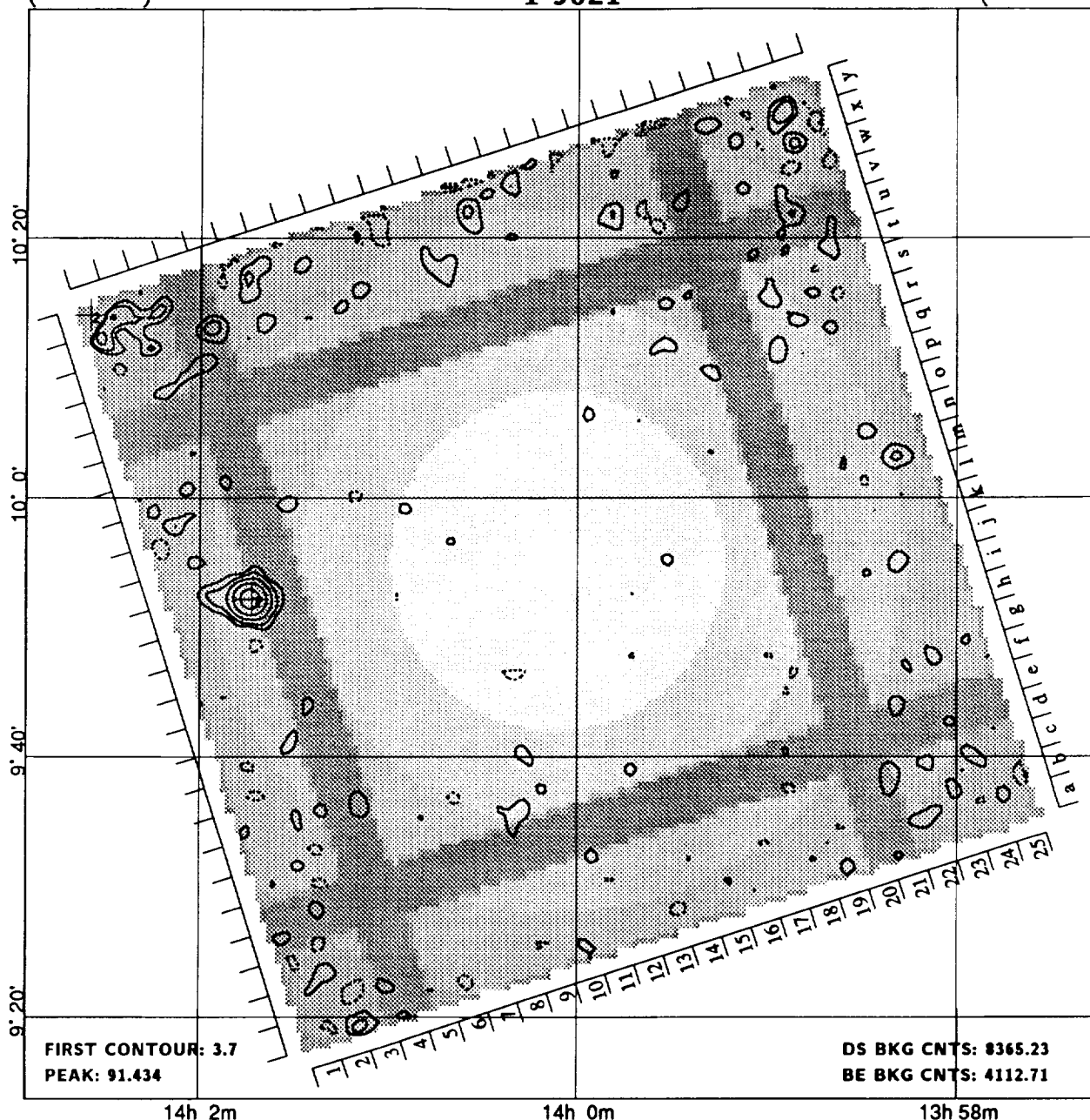
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3174	1	14 01 44.7	09 52 08	51	*0.051	0.010	27.9	3.1	5.0	1.4	1002	29.5	AH	AGN



(14h 0m)

I 9021

(14h 0m)



FIELD CENTER:  $14^{\text{h}}00^{\text{m}}04.5^{\text{s}}$   $09^{\circ}55'38''$  (B1950)  
 $14^{\text{h}}02^{\text{m}}32.4^{\text{s}}$   $09^{\circ}41'13''$  (J2000)  
 $l$ : 350.17  $b$ : 65.80

DATE: 1981/ 25 - 1981/ 25  
 LIVETIME: 6778.6s  
 ROLL ANGLE: -107.6°

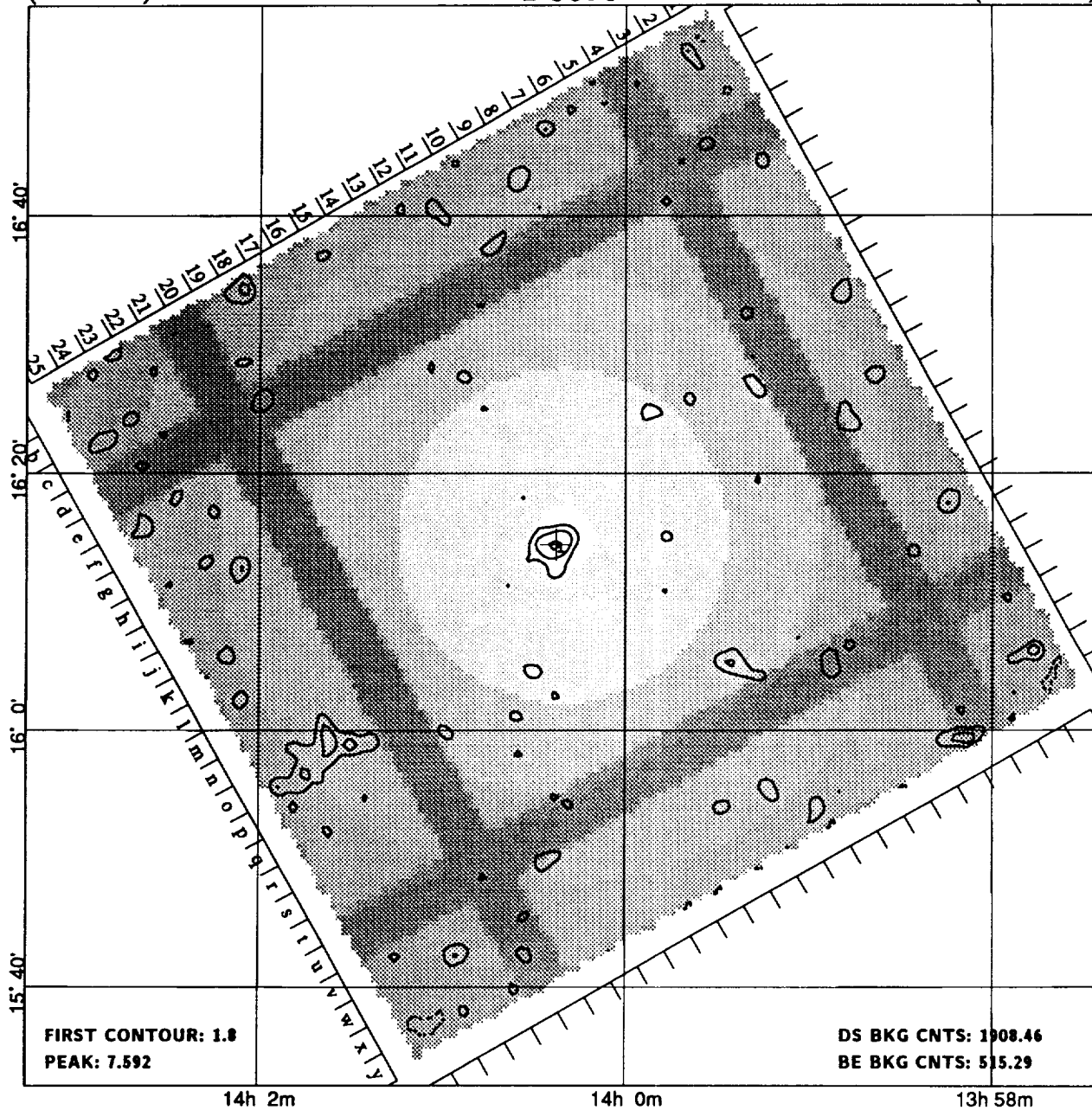
NH: 2.0E+20  
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3174	1L	14 01 43.6	09 52 13	47	*0.0789	0.0081	237.5	21.7	9.6	1.2	804	24.7	A	AGN
3183	2L	14 02 34.8	10 14 08	48	*0.073	0.016	100.8	54.0	4.7	0.0	1005	41.5	EI	

(14h 0m)

I 3070

(14h 0m)



## 1400+162: BL LAC'S IN CLUSTERS OF GALAXIES

FIELD CENTER:  $14^{\text{h}}00^{\text{m}}21.0^{\text{s}}$   $16^{\circ}14'20''$  (B1950)  
 $14^{\text{h}}02^{\text{m}}45.0^{\text{s}}$   $15^{\circ}59'56''$  (J2000)  
 $l: 2.63$   $b: 70.07$

DATE: 1979/180 - 1979/180  
 LIVETIME: 1546.5s  
 ROLL ANGLE:  $60.6^{\circ}$

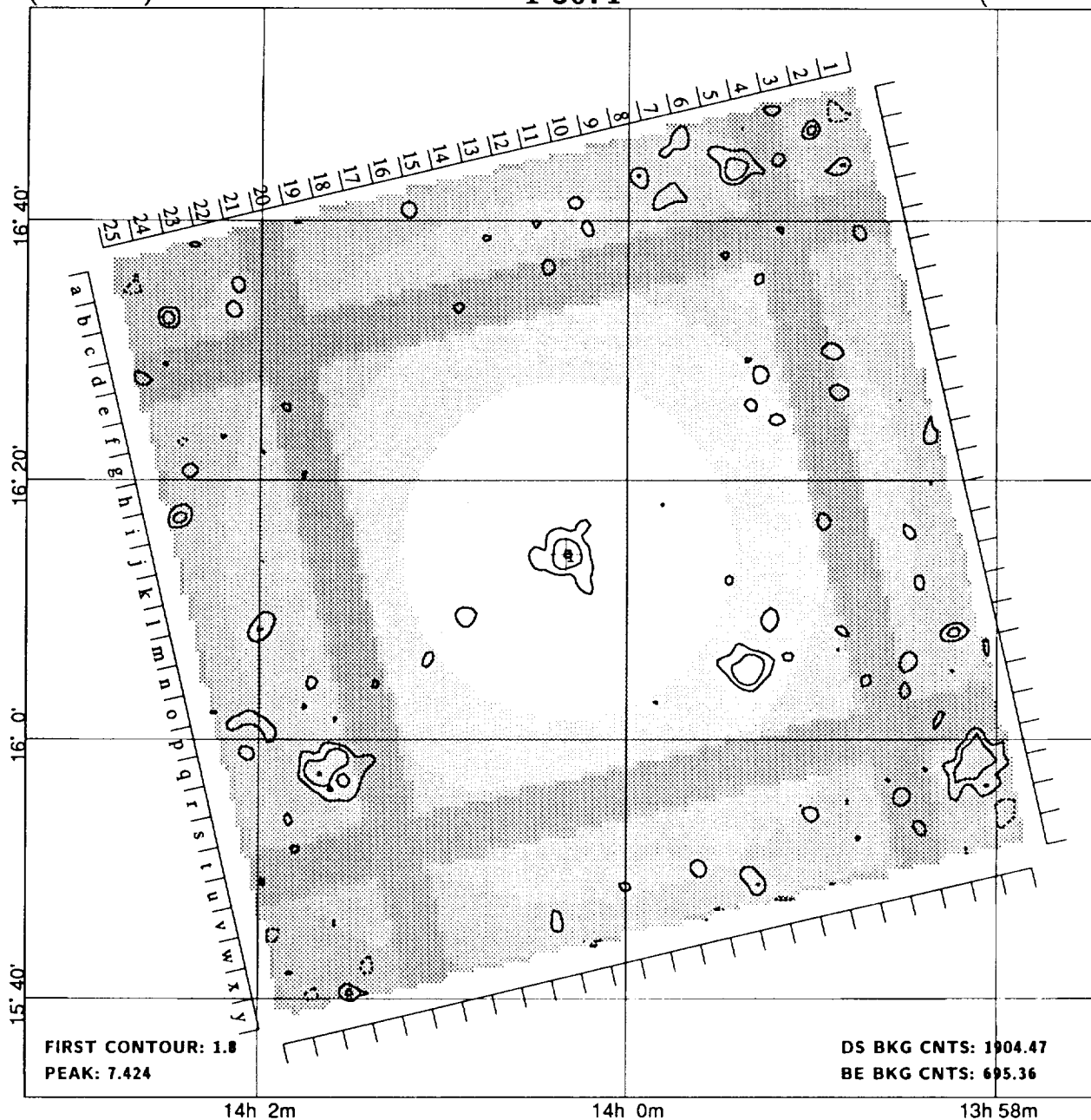
NH:  $1.6\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3165	1	14 00 22.7	16 14 30	36	0.0255	0.0052	29.4	6.6	4.9	1.1	0	0.4	AH	BL

(14h 0m)

I 3071

(14h 0m)



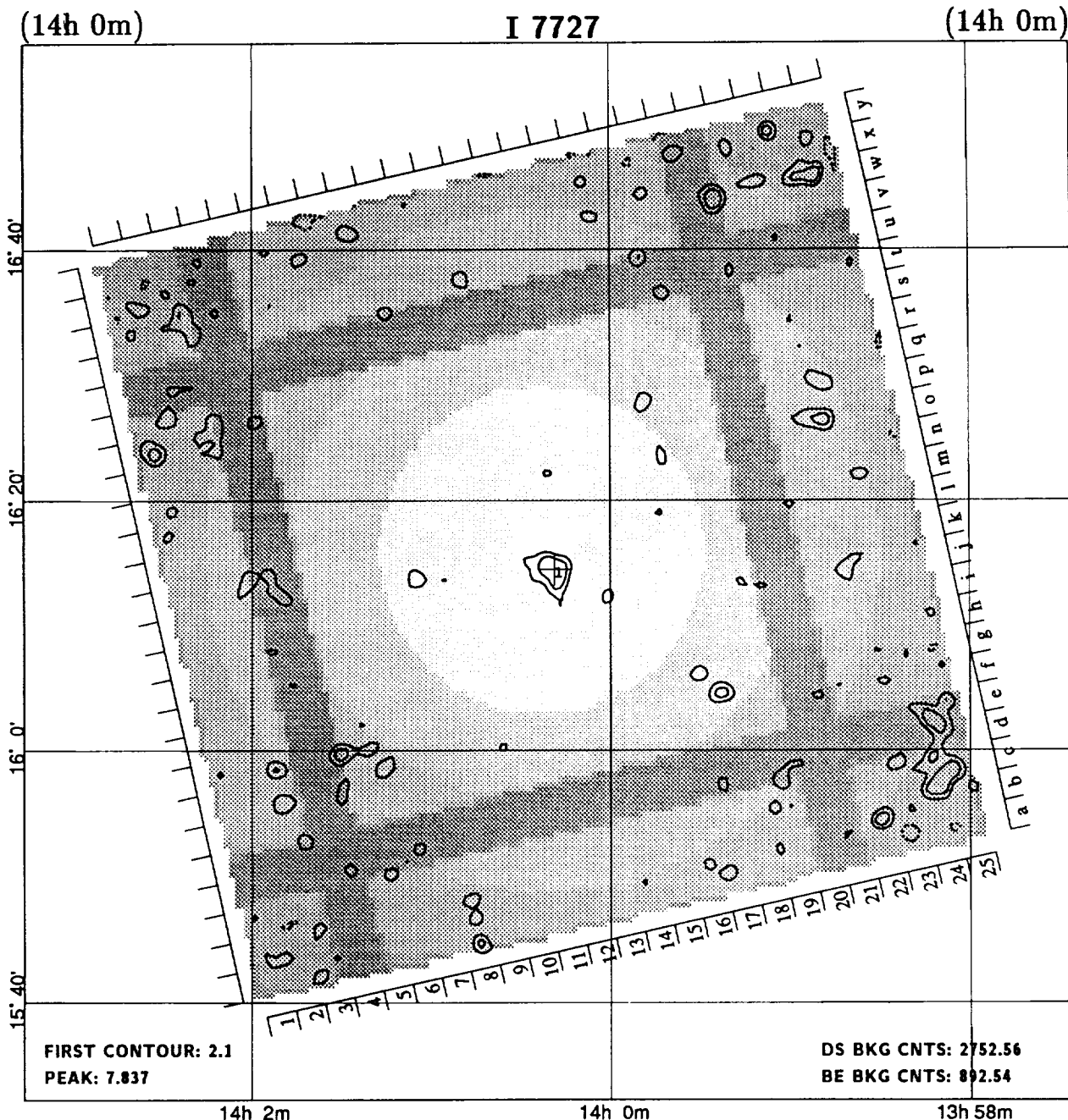
## 1400+162: BL LAC'S IN CLUSTERS OF GALAXIES

FIELD CENTER:  $14^{\text{h}}00^{\text{m}}21.0^{\text{s}}$   $16^{\circ}14'20''$  (B1950)  
 $14^{\text{h}}02^{\text{m}}45.0^{\text{s}}$   $15^{\circ}59'56''$  (J2000)  
 $l: 2.63$   $b: 70.07$

DATE: 1979/210 - 1979/210  
 LIVETIME: 1543.2s  
 ROLL ANGLE:  $76.9^{\circ}$

NH:  $1.6\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3165	1L	14 00 19.9	16 14 18	36	0.0258	0.0065	29.7	11.3	3.8	1.4	0	0.3	A	BL



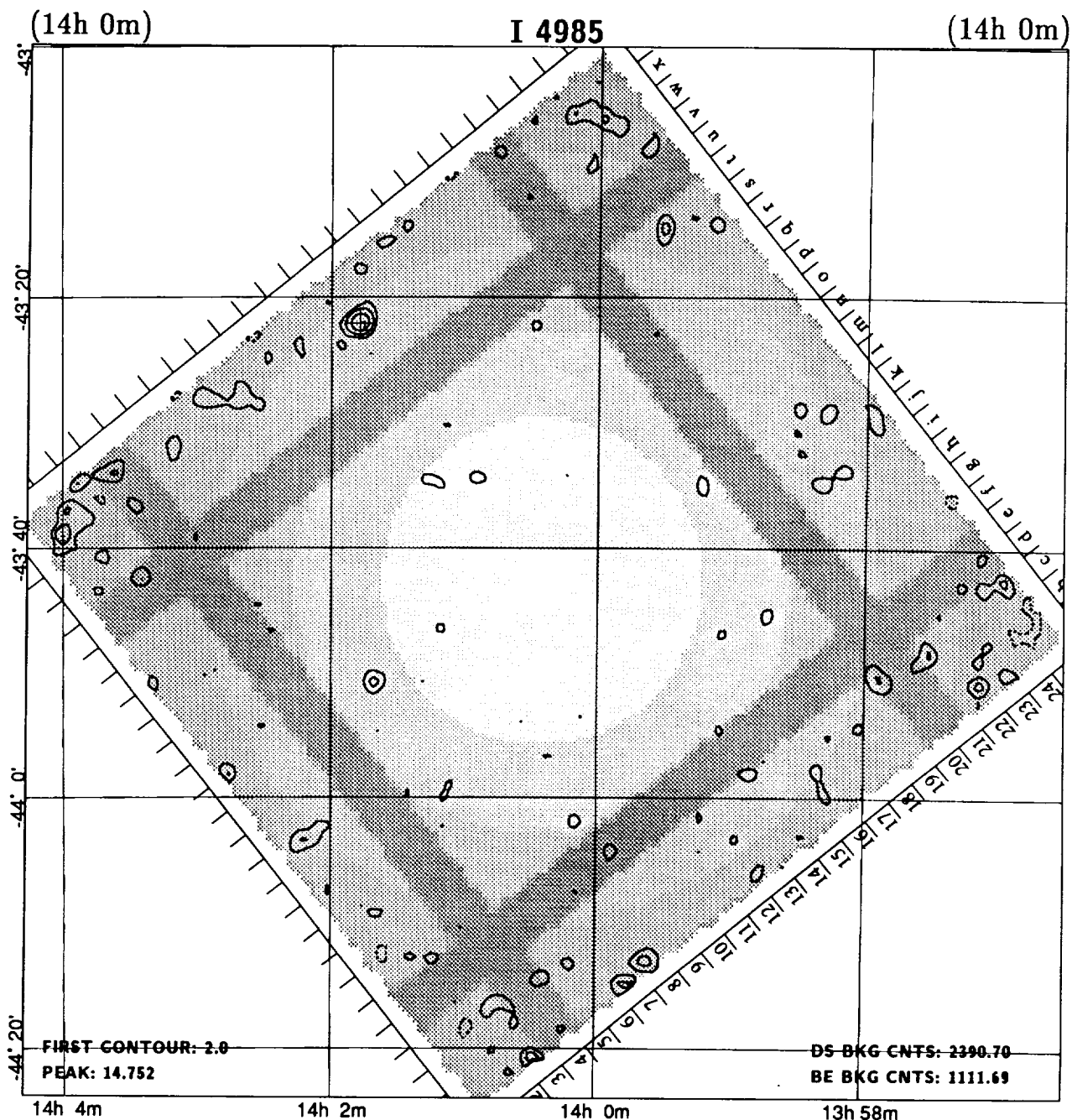
**1400+162,BL LAC OBJECTS W/GROUPS OR CLUSTERS OF GALAXIES**

**FIELD CENTER:**  $14^{\text{h}}00^{\text{m}}21.0^{\text{s}}$   $16^{\circ}14'20''$  (B1950)  
 $14^{\text{h}}02^{\text{m}}45.0^{\text{s}}$   $15^{\circ}59'56''$  (J2000)  
 $l: 2.63$   $b: 70.07$

**DATE:** 1980/ 20 - 1980/ 20  
**LIVETIME:** 2230.5s  
**ROLL ANGLE:** -102.6°

**NH:** 1.6E+20  
**REF/ID:**  
**FIELD FLAGS:** CL

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT ± RATE	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3165	1L	14 00 18.8	16 14 33	36	0.0206 0.0048	34.0	11.0	4.2	1.0	0	0.6	A	BL



**CEN BRIGHT PATCH #2**

FIELD CENTER:  $14^{\text{h}}00^{\text{m}}24.0^{\text{s}}$   $-43^{\circ}41'59''$  (B1950)  
 $14^{\text{h}}03^{\text{m}}30.3^{\text{s}}$   $-43^{\circ}56'23''$  (J2000)  
 $l: 316.40$   $b: 17.04$

DATE: 1980/ 45 - 1980/ 45  
 LIVETIME: 1937.3s  
 ROLL ANGLE:  $-128.7^{\circ}$

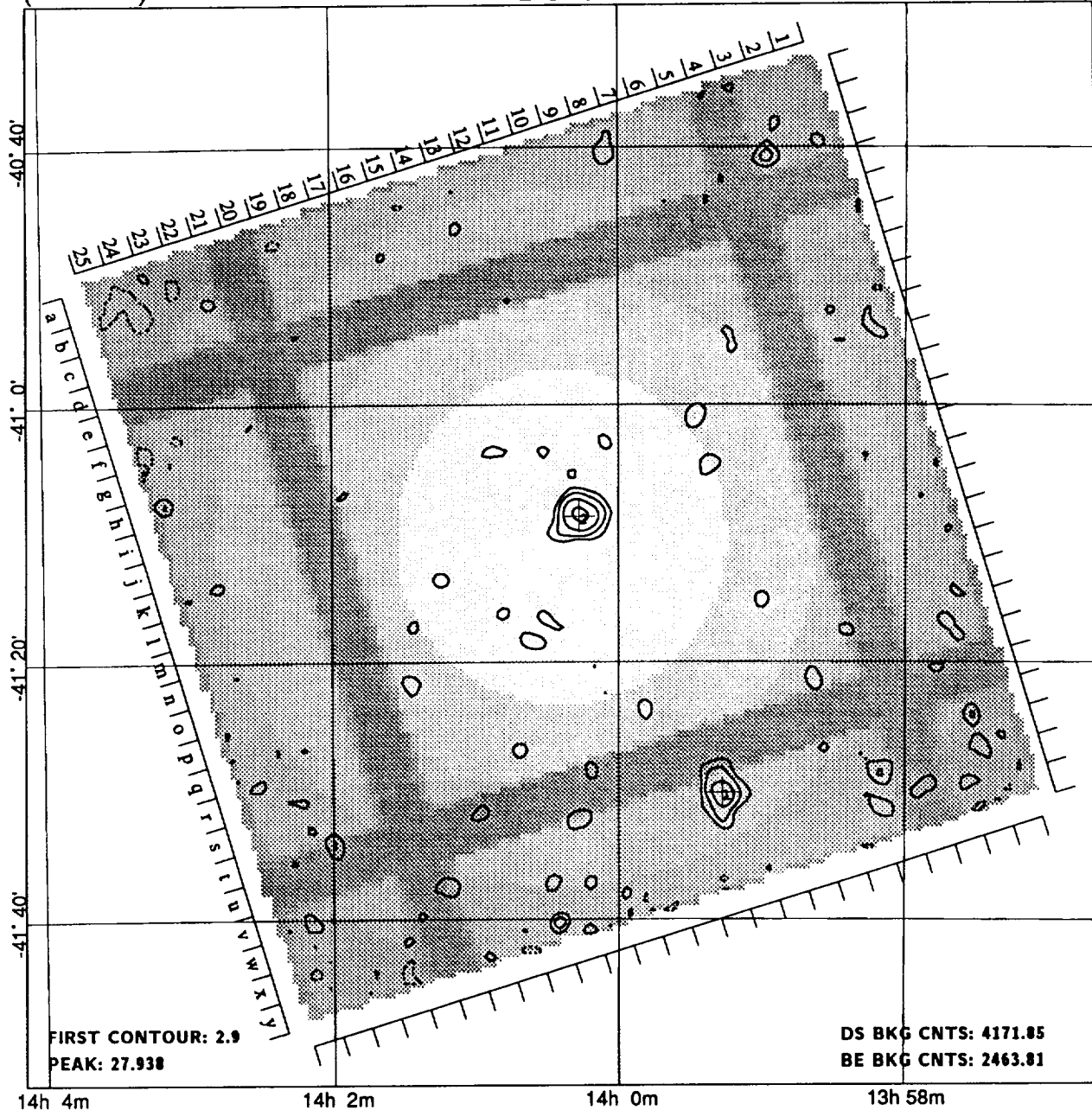
NH:  $8.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3175	1L	14 01 47.3	-43 22 03	51	0.0307	0.0077	25.1	4.9	3.8	0.8	0	24.9		

(14h 0m)

I 8704

(14h 0m)



## TARGET 3: REGIONS OF INTENSE STAR FORMATIONA

FIELD CENTER:  $14^{\text{h}}00^{\text{m}}24.0^{\text{s}}$   $-41^{\circ}10'58''$  (B1950)  
 $14^{\text{h}}03^{\text{m}}27.5^{\text{s}}$   $-41^{\circ}25'22''$  (J2000)  
 $l: 317.16$   $b: 19.45$

DATE: 1980/205 - 1980/205  
 LIVETIME: 3380.6s  
 ROLL ANGLE:  $72.9^{\circ}$

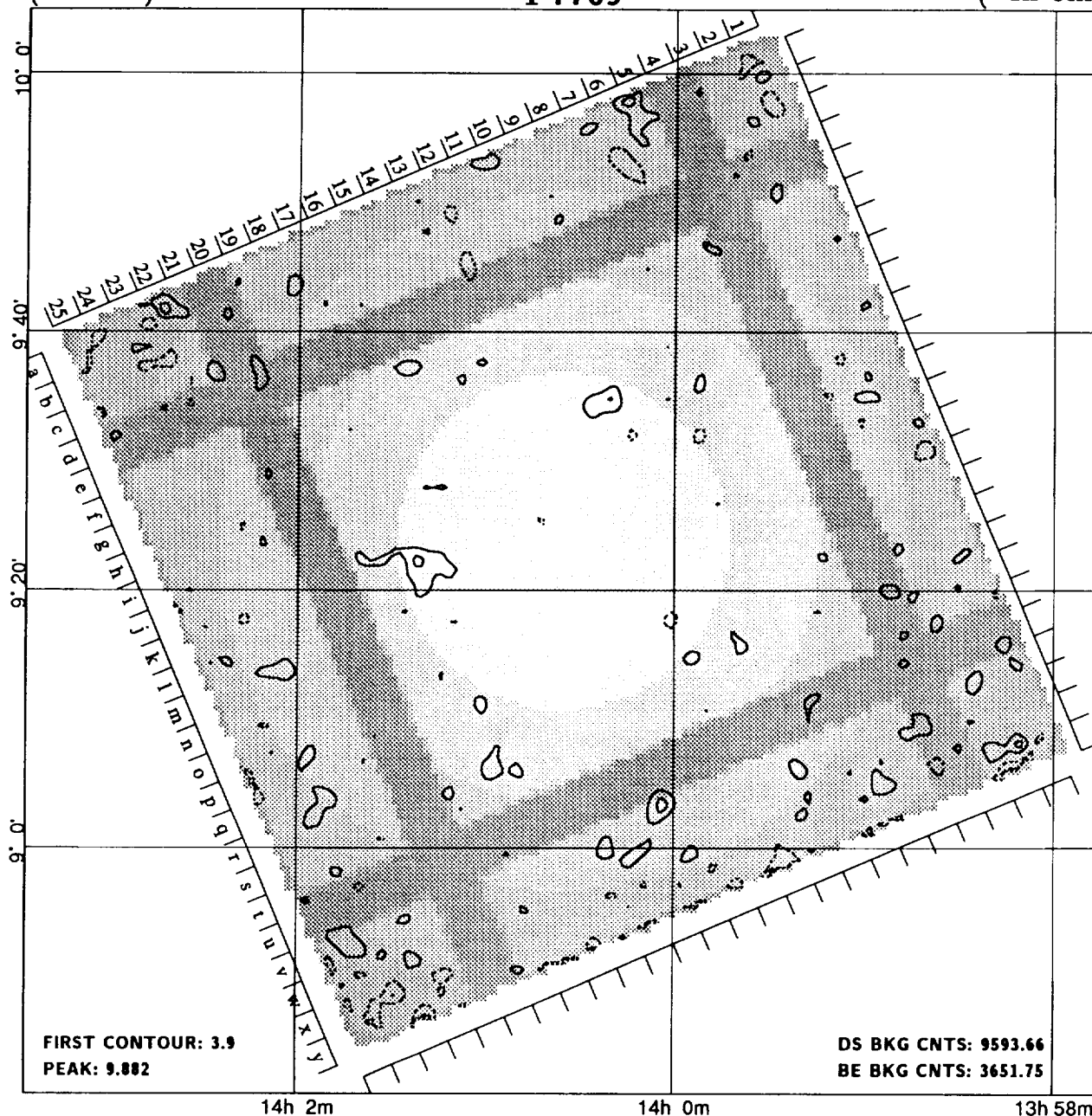
NH:  $5.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3161	1L	13 59 16.5	-41 30 10	50	0.0250	0.0059	38.4	16.6	4.1	1.2	600	23.0	
3164	2L	14 00 16.4	-41 08 37	31	0.0423	0.0055	105.4	32.6	7.6	1.2	0	2.8	G

(14h 0m)

I 7769

(14h 0m)



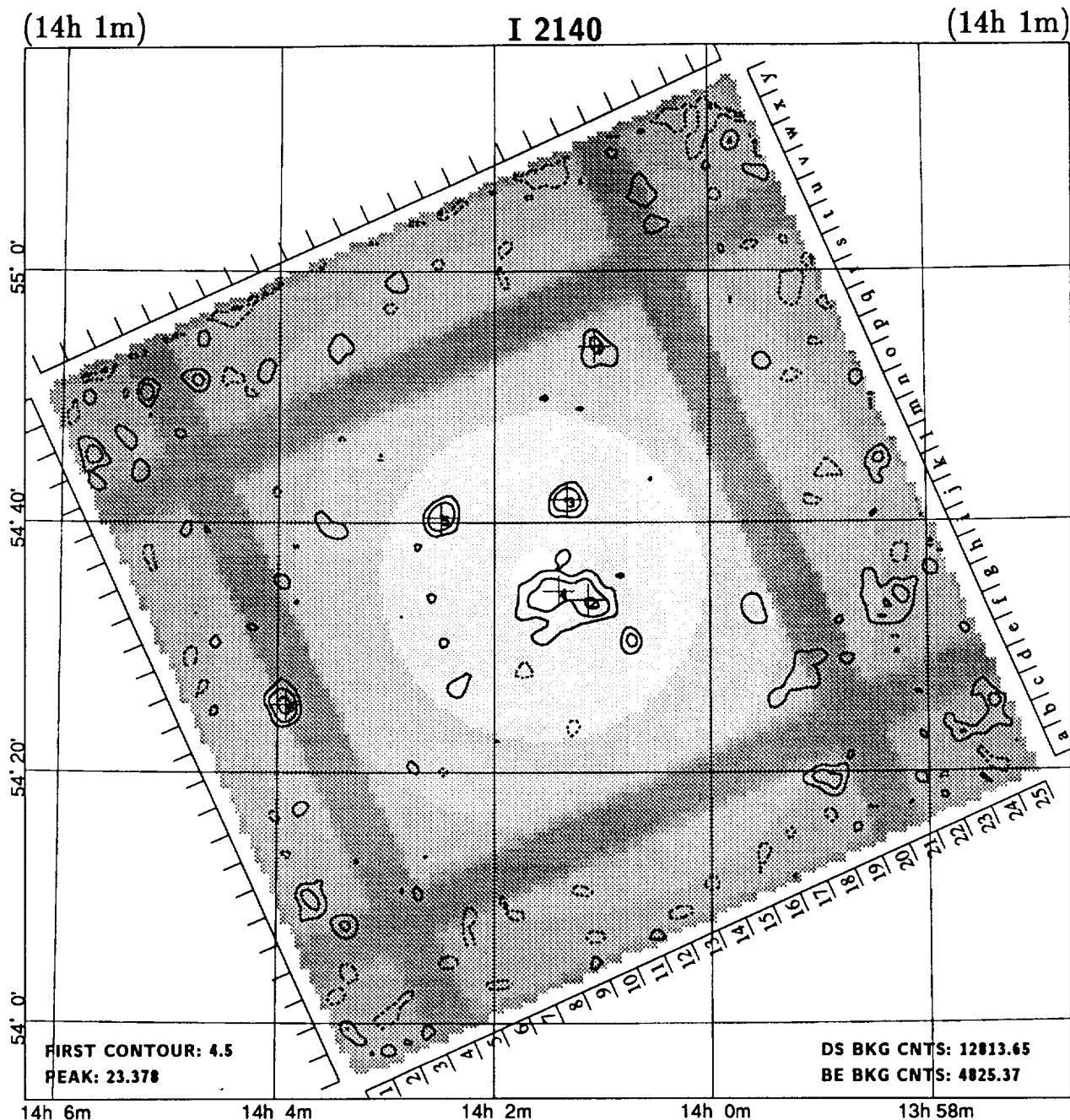
## Z74-23, SPIRAL-RICH CLUSTERS OF GALAXIES

FIELD CENTER:  $14^{\text{h}}00^{\text{m}}36.0^{\text{s}}$   $09^{\circ}22'59''$  (B1950)  
 $14^{\text{h}}03^{\text{m}}04.2^{\text{s}}$   $09^{\circ}08'36''$  (J2000)  
 $l: 349.54$   $b: 65.31$

DATE: 1980/194 - 1980/194  
 LIVETIME: 7774.0s  
 ROLL ANGLE:  $67.0^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L





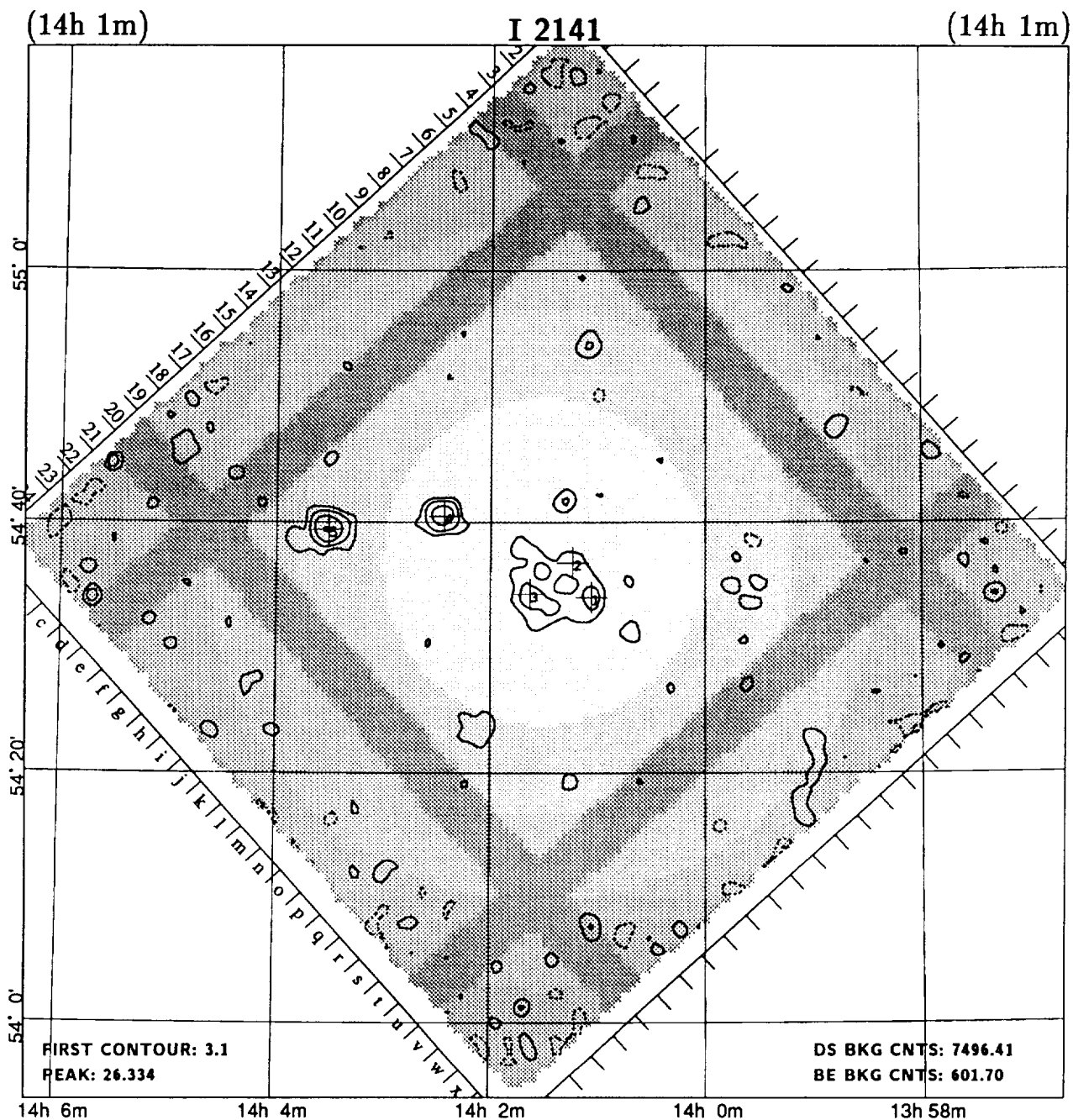
X-RAY SURVEY OF NORMAL GALAXIES: NGC5457=M101

FIELD CENTER:  $14^{\text{h}}01^{\text{m}}30.0^{\text{s}}$   $54^{\circ}35'59''$  (B1950)  
 $14^{\text{h}}03^{\text{m}}16.1^{\text{s}}$   $54^{\circ}21'37''$  (J2000)  
 $l: 102.04$   $b: 59.76$

DATE: 1979/ 6 - 1979/ 6  
 LIVETIME: 10383.4s  
 ROLL ANGLE:  $-114.2^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3166	1	14 01 04.1	54 53 59	55	0.0052	0.0014	28.7	34.3	3.6	1.0	200	18.6	H	S
3168	2	14 01 07.8	54 33 52	35	0.0114	0.0015	85.5	49.5	7.4	2.7	0	4.0	AH	
3170	3	14 01 19.6	54 41 51	41	0.0080	0.0014	58.6	40.4	5.9	0.9	0	6.2		
3171	4	14 01 24.2	54 34 33	35	0.0082	0.0014	62.7	51.3	5.9	4.1	0	2.3	H	†
3181	5	14 02 29.7	54 40 22	41	0.0104	0.0015	72.3	41.7	6.8	0.9	0	9.7	AH	
3188	6	14 03 55.2	54 25 25	51	*0.0109	0.0018	52.1	24.9	5.9	0.9	907	23.7	H	



X-RAY SURVEY OF NORMAL GALAXIES: NGC5457=M101

FIELD CENTER:  $14^h 01^m 30.0^s$   $54^\circ 35' 59''$  (B1950)  
 $14^h 03^m 16.1^s$   $54^\circ 21' 37''$  (J2000)  
 $l: 102.04$   $b: 59.76$

DATE: 1979/167 - 1979/167  
 LIVETIME: 6074.6s  
 ROLL ANGLE:  $47.9^\circ$

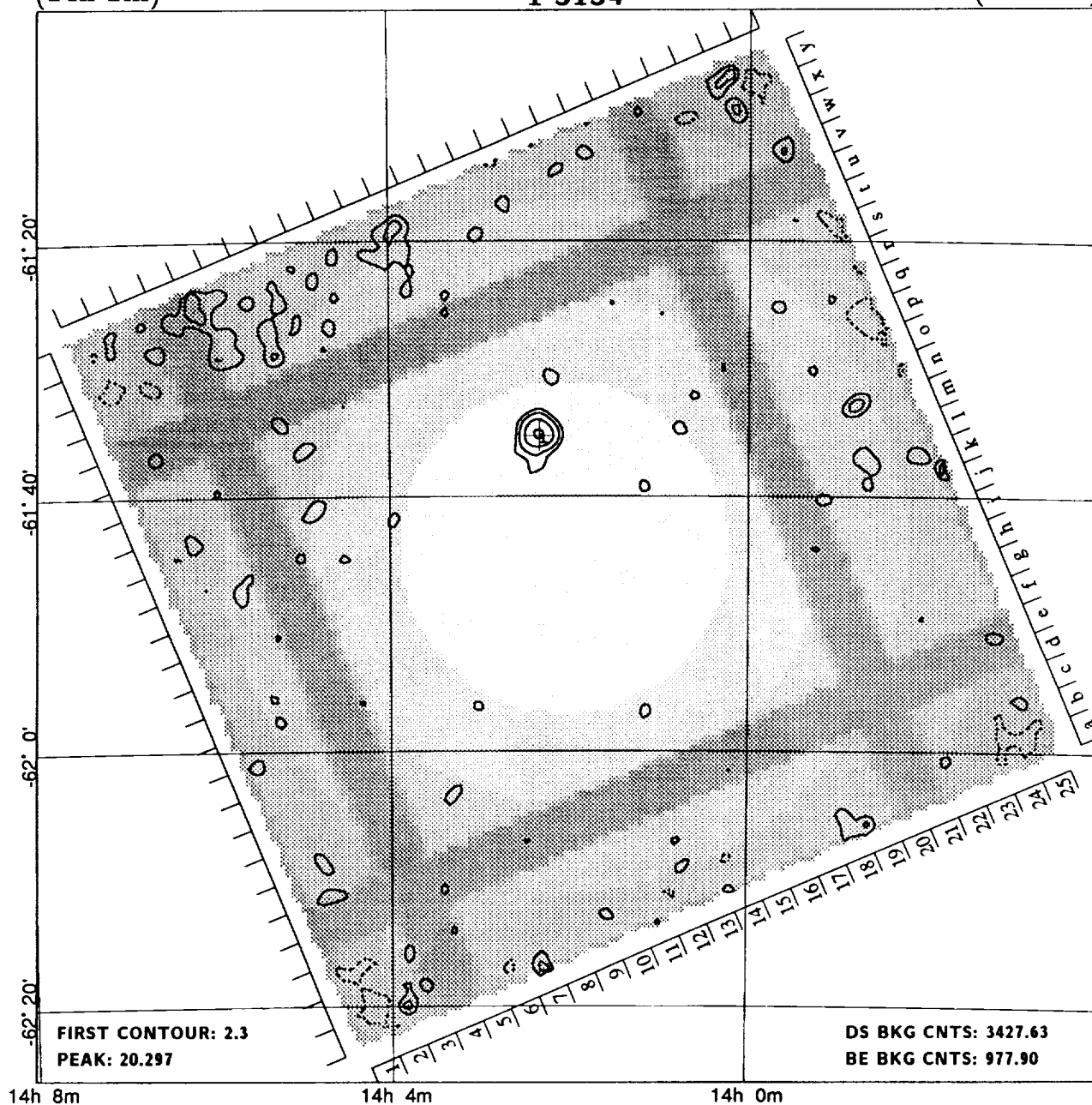
NH:  $1.2E+20$   
 REF/ID: !  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3168	1	14 01 03.5	54 34 00	36	0.0065	0.0016	28.5	20.5	4.1	4.4	0	4.4	AH	
3169	2	14 01 14.0	54 36 47	41	0.0060	0.0015	26.7	18.3	4.0	6.4	0	2.5		
3173	3	14 01 37.8	54 34 15	36	0.0091	0.0017	40.7	18.3	5.3	3.7	0	1.9	H	G
3181	4	14 02 26.1	54 40 29	41	0.0174	0.0023	71.7	19.3	7.5	1.0	0	9.6	AH	
3186	5	14 03 30.9	54 39 24	50	0.0225	0.0028	75.0	14.0	8.0	1.2	0	17.8	H	Q

(14h 2m)

I 3154

(14h 2m)



**FIELD CENTER:**  $14^h 02^m 00.0^s$   $-61^\circ 43' 59''$  (B1950)  
 $14^h 05^m 38.0^s$   $-61^\circ 58' 19''$  (J2000)  
 $l: 311.53$   $b: -0.34$

**DATE:** 1979/ 35 - 1979/ 35  
**LIVETIME:** 2777.5s  
**ROLL ANGLE:**  $-112.8^\circ$

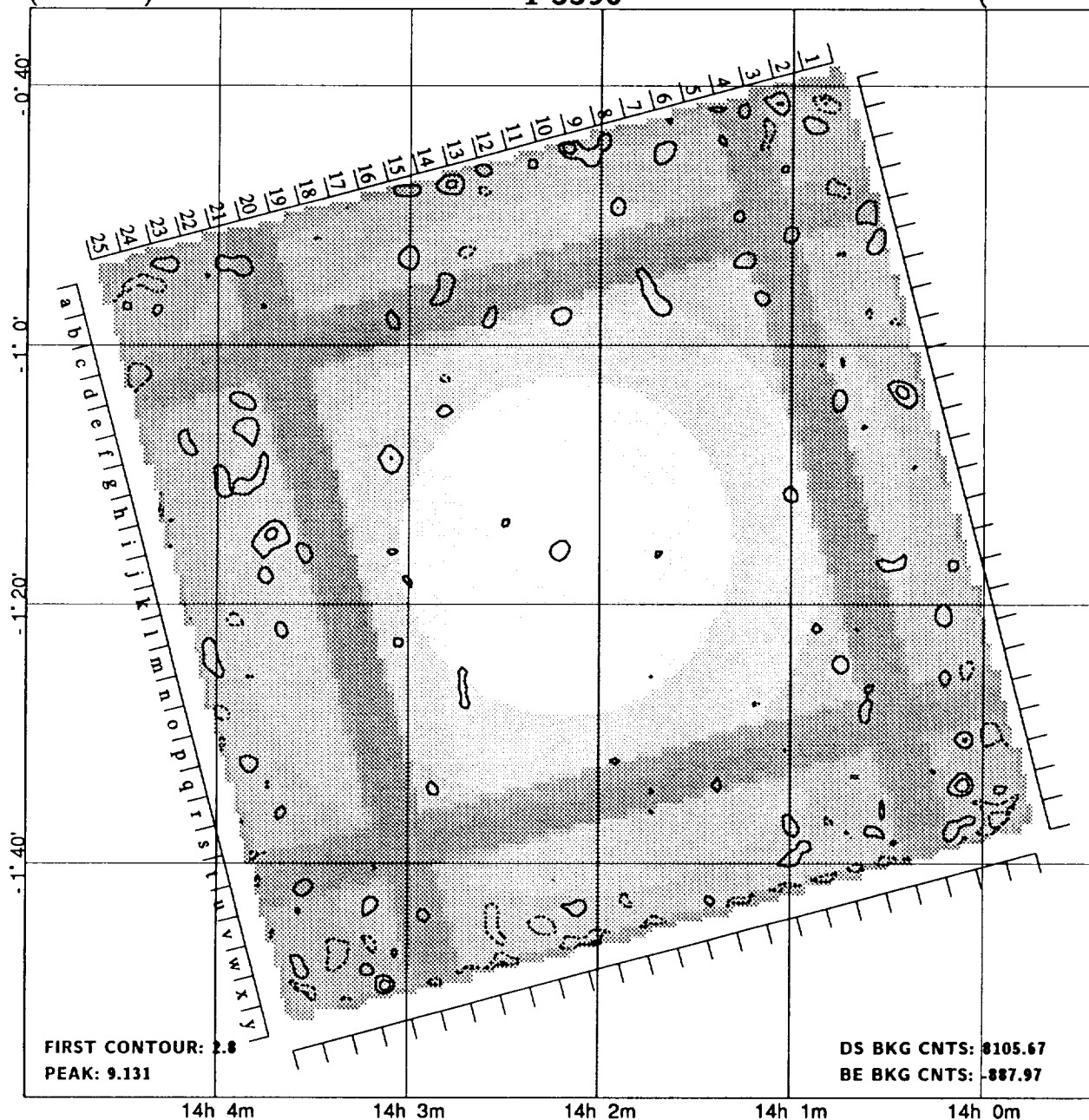
**NH:**  $1.4E+21$   
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3178	1	14 02 20.0	-61 35 13	38	0.0386	0.0049	72.5	11.5	7.9	1.1	0	9.2	AH	

(14h 2m)

I 5396

(14h 2m)

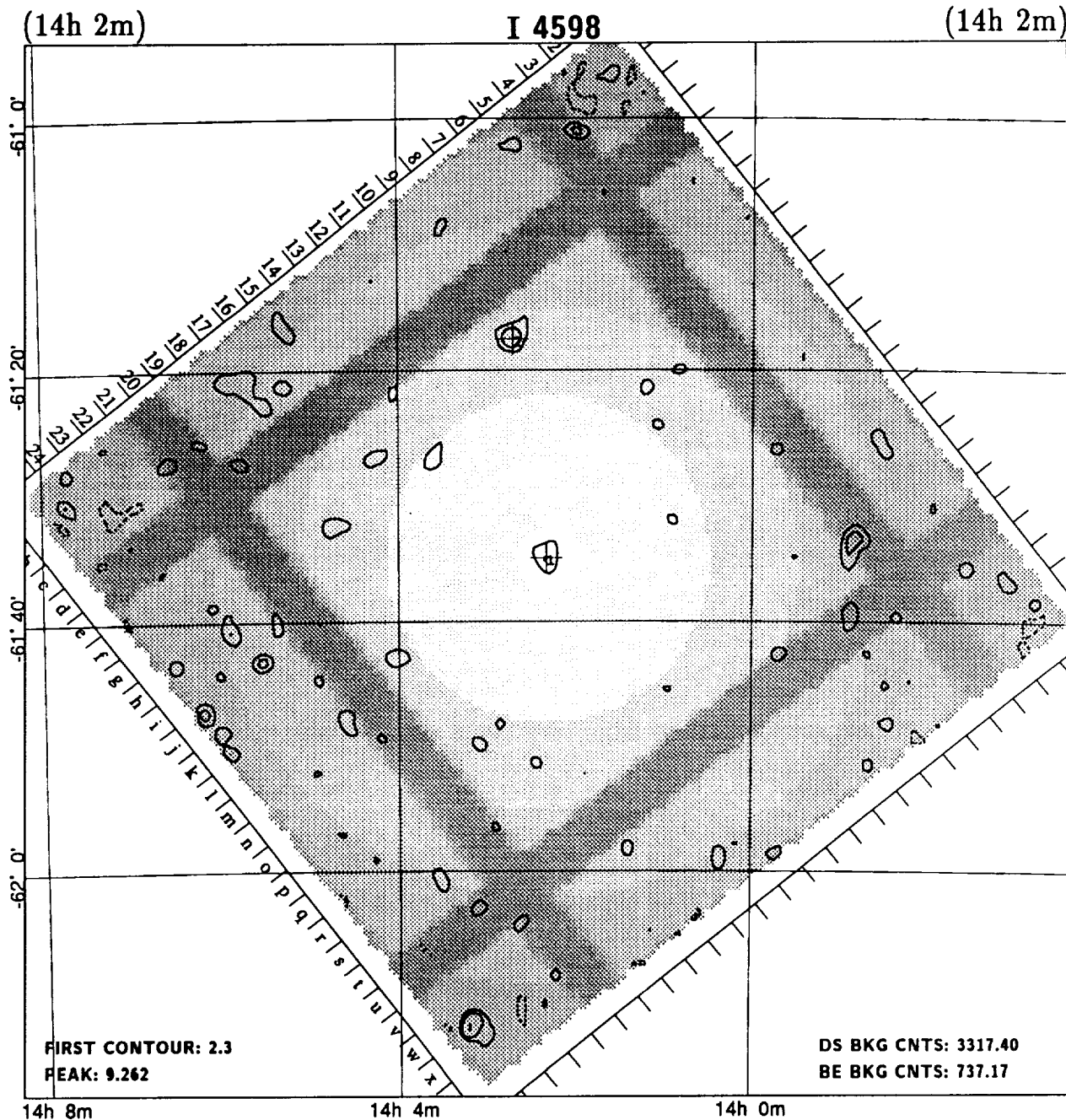


PKS 1402-12, QSO'S WITH RADIO FLAT SPECTRUM (C.S.)

FIELD CENTER:  $14^h 02^m 11.7^s$   $-01^\circ 16' 05''$  (B1950)  
 $14^h 04^m 46.3^s$   $-01^\circ 30' 26''$  (J2000)  
 $l: 337.51$   $b: 56.36$

DATE: 1980/217 - 1980/217  
 LIVETIME: 6568.2s  
 ROLL ANGLE:  $75.2^\circ$

NH:  $3.9E+20$   
 REF/ID: !  
 FIELD FLAGS:



**FOLLOWUP TO SEQUENCE 3154: POINT SOURCE PERIODICITY STUDY**

**FIELD CENTER:**  $14^{\text{h}}02^{\text{m}}19.2^{\text{s}}$   $-61^{\circ}35'59''$  (B1950)  
 $14^{\text{h}}05^{\text{m}}57.0^{\text{s}}$   $-61^{\circ}50'18''$  (J2000)  
 $l: 311.60$   $b: -0.23$

**DATE:** 1979/242 - 1979/242  
**LIVETIME:** 2688.2s  
**ROLL ANGLE:**  $51.8^{\circ}$

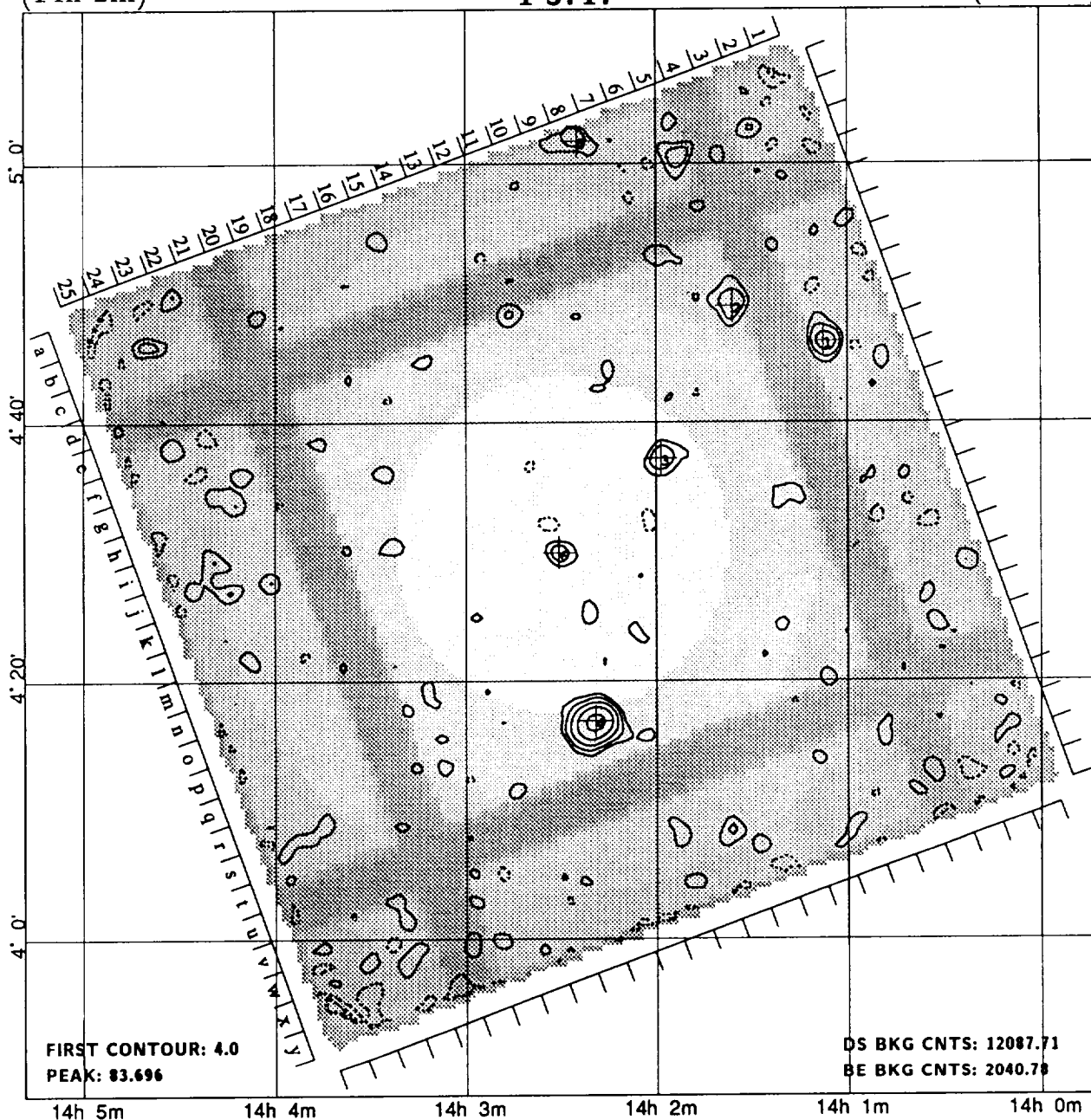
**NH:**  $1.4\text{E}+21$   
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
3178	1	14 02 19.6	-61 34 57	41	0.0111	0.0029	22.3	10.7	3.9	0.6	0	1.2	A
3184	2	14 02 42.2	-61 17 32	53	0.0128	0.0035	18.9	8.1	3.6	0.7	0	18.5	H

(14h 2m)

I 3717

(14h 2m)



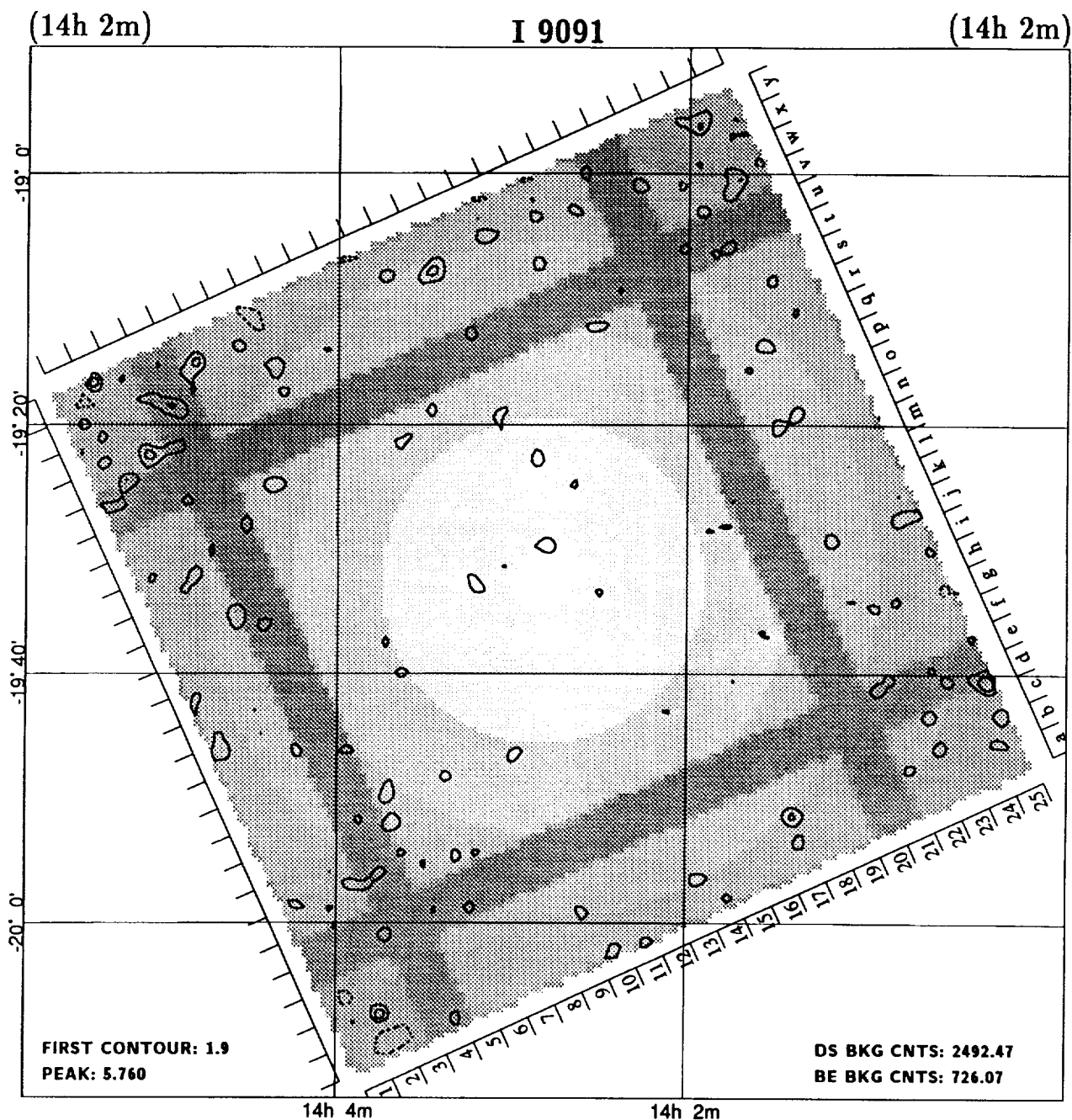
## 1402+44, QUASAR SURVEY

FIELD CENTER:  $14^{\text{h}}02^{\text{m}}30.0^{\text{s}}$   $04^{\circ}29'52''$  (B1950)  
 $14^{\text{h}}05^{\text{m}}01.1^{\text{s}}$   $04^{\circ}15'33''$  (J2000)  
 $l: 343.67$   $b: 61.17$

DATE: 1979/203 - 1979/204  
 LIVETIME: 9795.0s  
 ROLL ANGLE:  $70.0^{\circ}$

NH:  $2.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3167	1	14 01 07.5	04 46 15	50	*0.0112	0.0021	45.8	25.2	5.4	0.9	602	26.2	H	
3172	2	14 01 36.1	04 48 57	52	*0.0074	0.0016	33.7	21.3	4.5	0.9	502	23.3	H	
3176	3	14 01 58.6	04 37 12	41	0.0078	0.0014	50.9	29.1	5.7	0.8	0	10.9	H	
3177	4	14 02 19.2	04 16 56	38	0.0481	0.0030	287.5	29.5	16.1	1.2	0	13.2	H	BL
3180	5	14 02 24.9	05 01 45	98	*0.0069	0.0019	21.0	14.0	3.6	1.0	601	31.9	H	
3182	6	14 02 30.7	04 29 55	35	0.0056	0.0012	40.9	36.1	4.7	0.6	0	0.2		Q



**CLUSTERS OF GALAXIES AT MODERATE REDSHIFTS( $0.1 < z < 0.3$ ): 26**

FIELD CENTER:  $14^h 02^m 48.0^s$   $-19^\circ 31' 59''$  (B1950)  
 $14^h 05^m 34.0^s$   $-19^\circ 46' 18''$  (J2000)  
 $l: 325.84$   $b: 39.78$

DATE: 1981/ 44 - 1981/ 44  
 LIVETIME: 2019.8s  
 ROLL ANGLE:  $-114.5^\circ$

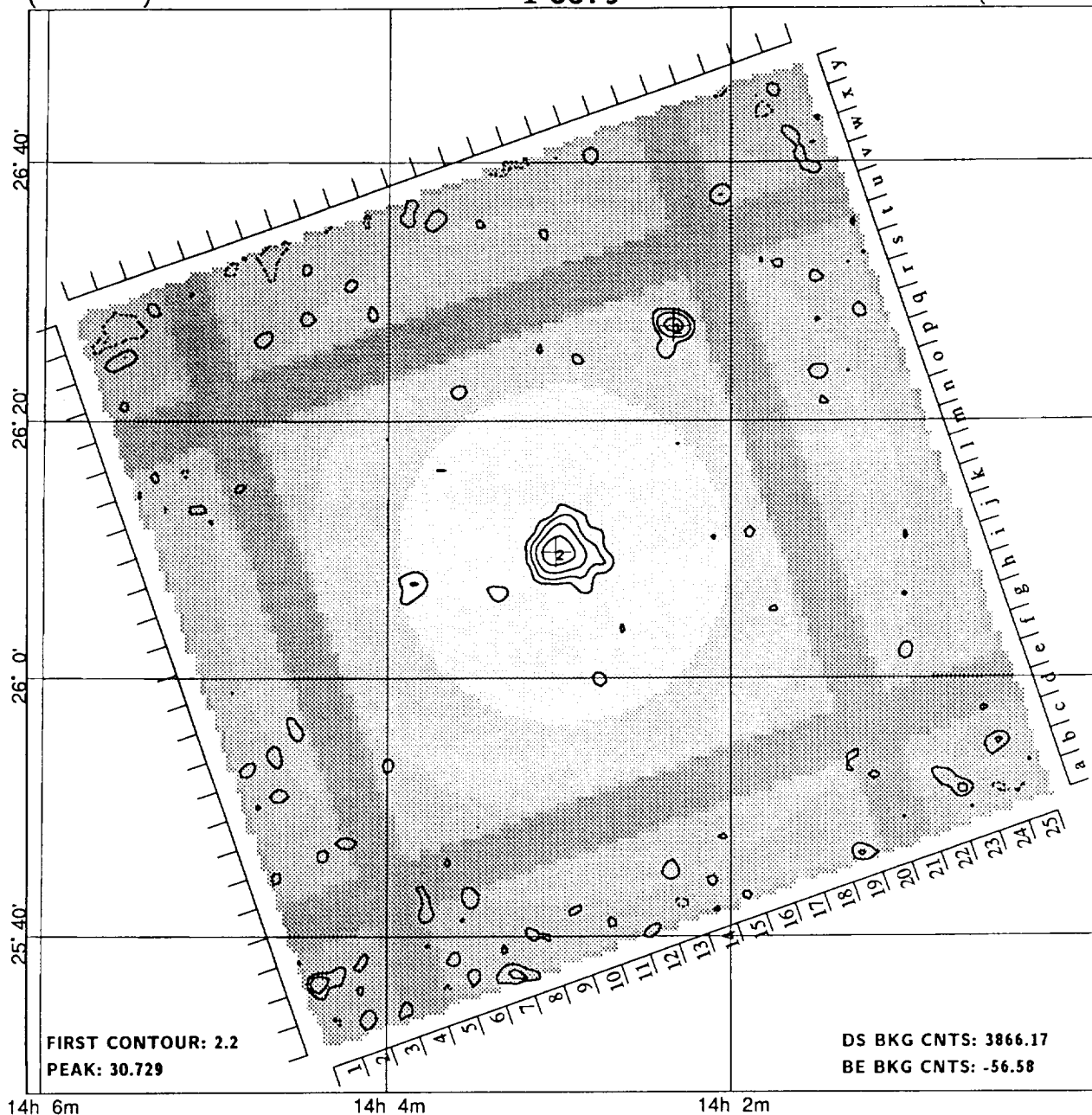
NH:  $6.5E+20$   
 REF/ID:  
 FIELD FLAGS:



(14h 2m)

I 5379

(14h 2m)



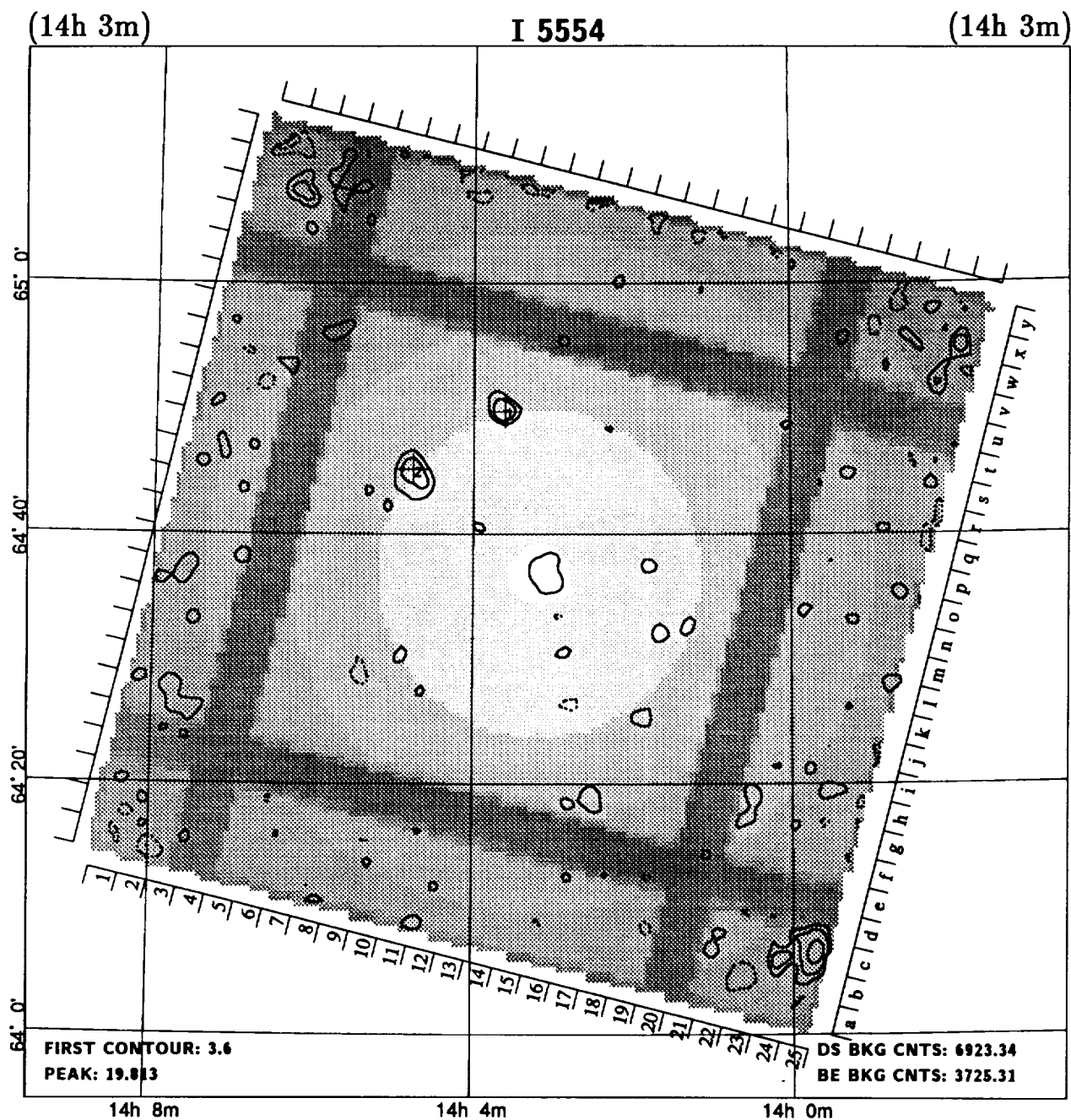
## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $14^{\text{h}}02^{\text{m}}58.8^{\text{s}}$   $26^{\circ}09'58''$  (B1950)  
 $14^{\text{h}}05^{\text{m}}15.7^{\text{s}}$   $25^{\circ}55'40''$  (J2000)  
 $l$ : 32.96  $b$ : 73.46

DATE: 1981/ 17 - 1981/ 17  
 LIVETIME: 3132.9s  
 ROLL ANGLE:  $-109.2^{\circ}$

NH:  $1.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3179	1	14 02 20.0	26 27 17	51	0.0173	0.0037	27.9	7.1	4.7	0.9	0	19.4	H	
3185	2	14 03 01.2	26 09 47	31	0.0572	0.0051	133.6	8.4	11.2	1.8	0	0.7	H	Q

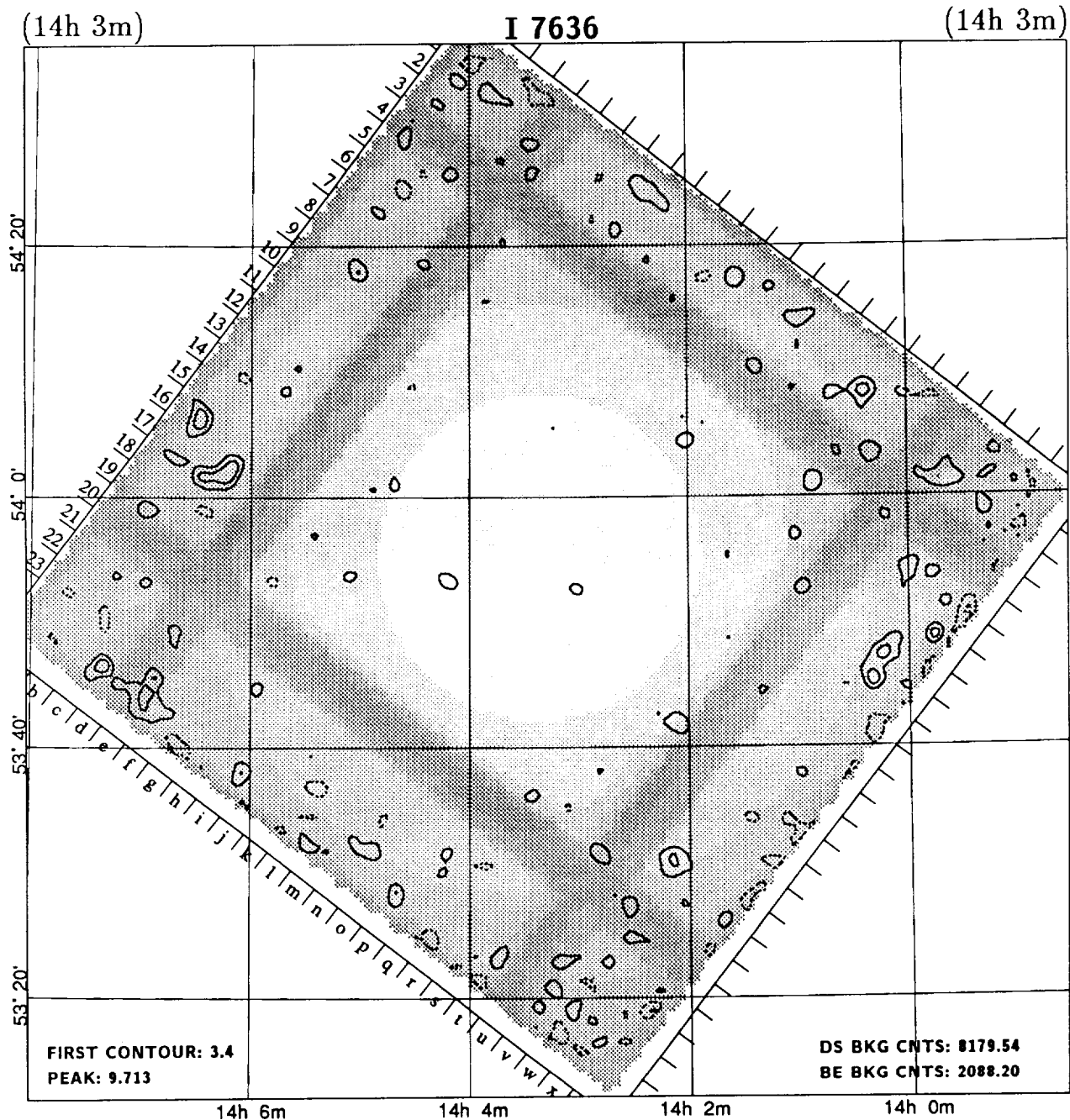


FIELD CENTER: 14<sup>h</sup>03<sup>m</sup>03.0<sup>s</sup> 64°36'59" (B1950)  
 14<sup>h</sup>04<sup>m</sup>24.7<sup>s</sup> 64°22'40" (J2000)  
 $l$ : 110.52  $b$ : 50.96

DATE: 1981/ 40 - 1981/ 40  
 LIVETIME: 5610.2s  
 ROLL ANGLE: -75.9°

NH: 1.9E+20  
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3187	1L	14 03 36.3	64 49 44	41	0.0113	0.0027	39.2	21.8	4.1	0.7	0	13.2		
3191	2L	14 04 45.9	64 45 12	42	0.0105	0.0028	36.7	29.3	3.6	1.1	0	13.6		



NGC 5474, DWARF GAL OF M101 GROUP

FIELD CENTER:  $14^{\text{h}}03^{\text{m}}18.0^{\text{s}}$   $53^{\circ}54'05''$  (B1950)  
 $14^{\text{h}}05^{\text{m}}04.7^{\text{s}}$   $53^{\circ}39'47''$  (J2000)  
 $l: 100.82$   $b: 60.19$

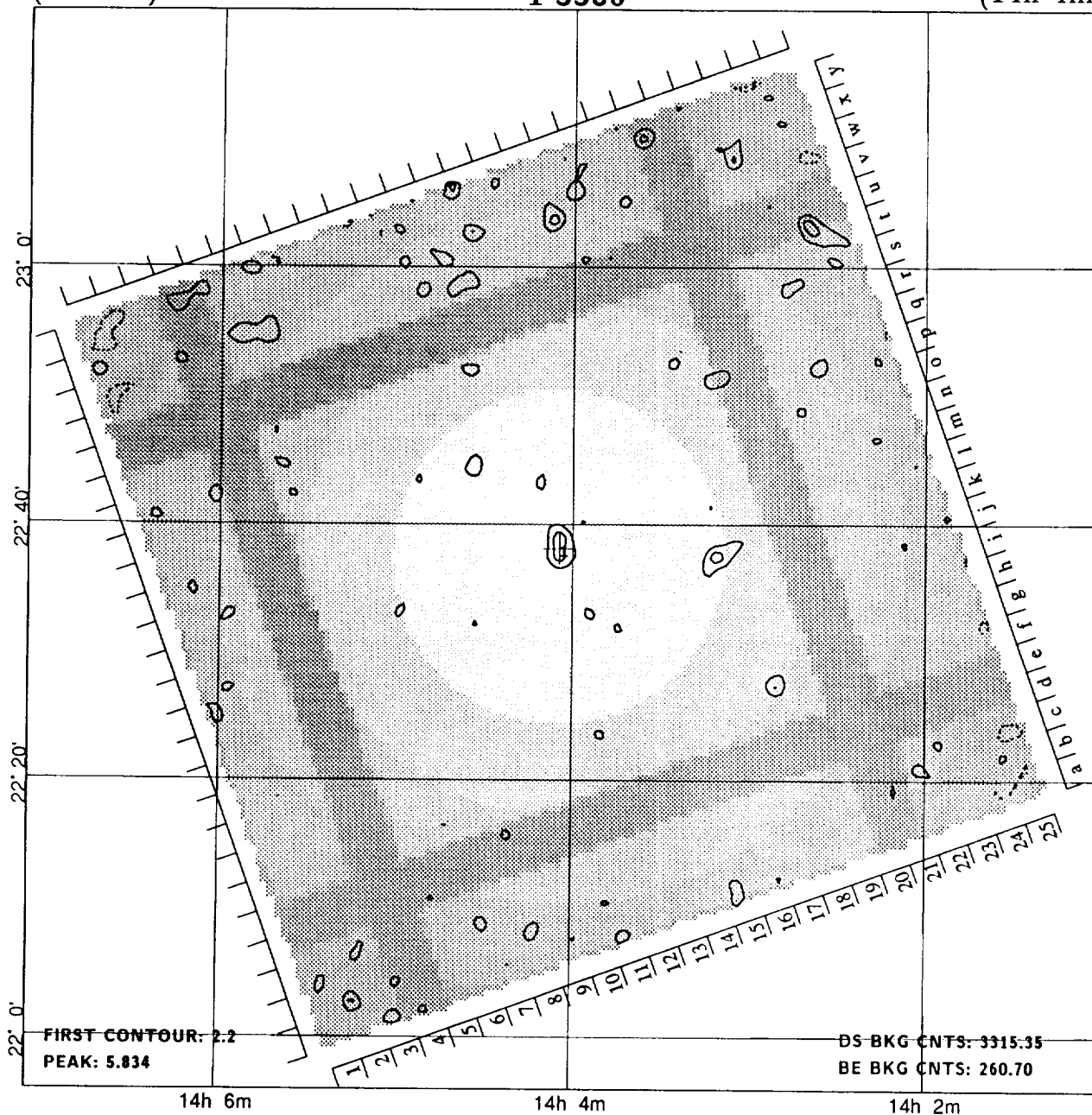
DATE: 1980/155 - 1980/155  
 LIVETIME: 6628.2s  
 ROLL ANGLE:  $37.6^{\circ}$

NH:  $1.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 4m)

I 5380

(14h 4m)



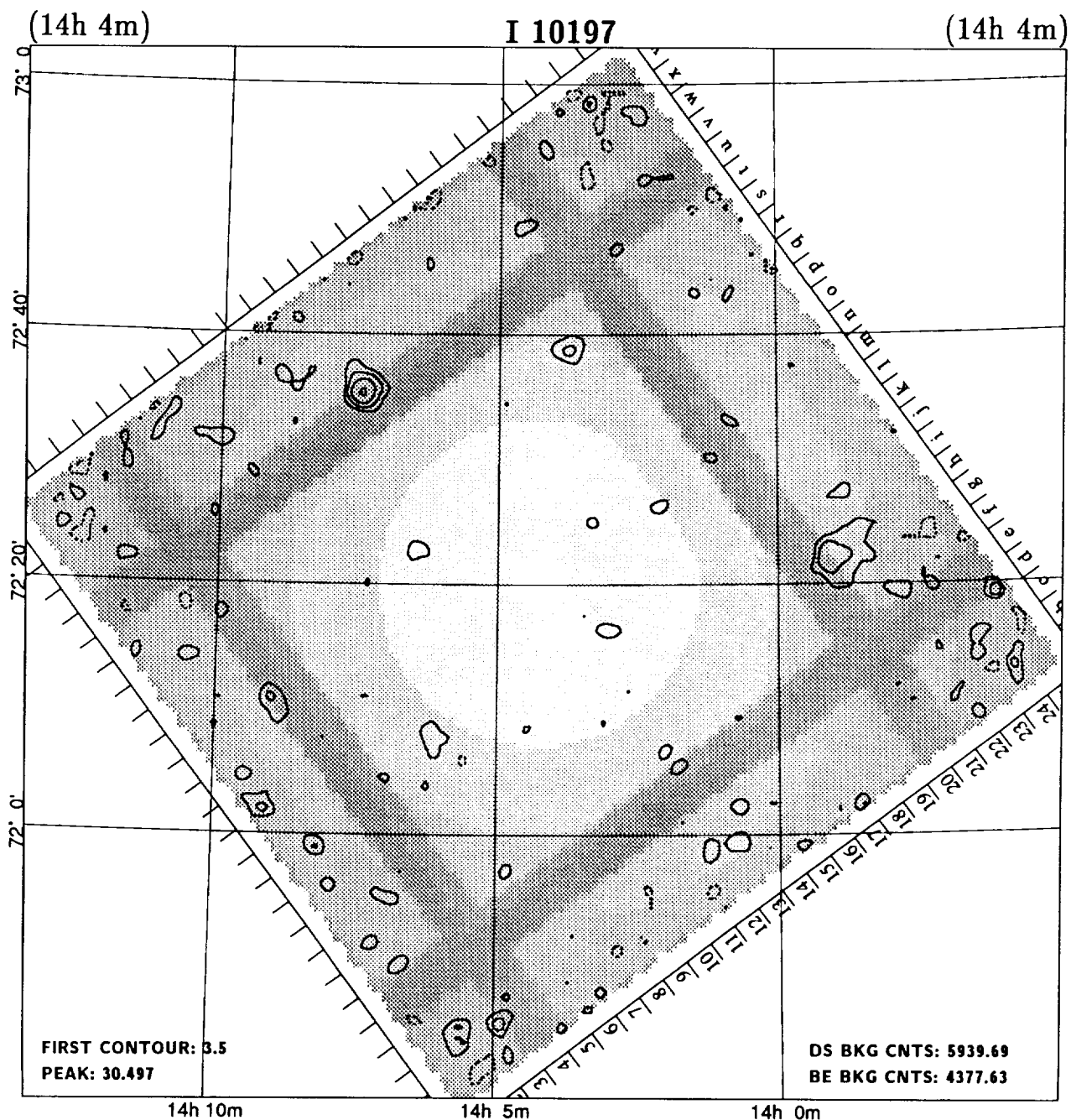
## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $14^{\text{h}}04^{\text{m}}02.8^{\text{s}}$   $22^{\circ}37'58''$  (B1950)  
 $14^{\text{h}}06^{\text{m}}22.1^{\text{s}}$   $22^{\circ}23'42''$  (J2000)  
 $l: 21.47$   $b: 72.36$

DATE: 1981/ 17 - 1981/ 17  
 LIVETIME: 2686.5s  
 ROLL ANGLE:  $-109.7^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3189	1	14 04 04.6	22 38 05	37	0.0111	0.0028	22.3	8.7	4.0	0.8	0	0.4	H	Q



FIELD CENTER:  $14^h 04^m 12.0^s$   $72^\circ 20' 59''$  (B1950)  
 $14^h 04^m 57.9^s$   $72^\circ 06' 41''$  (J2000)  
 $l: 115.21$   $b: 43.90$

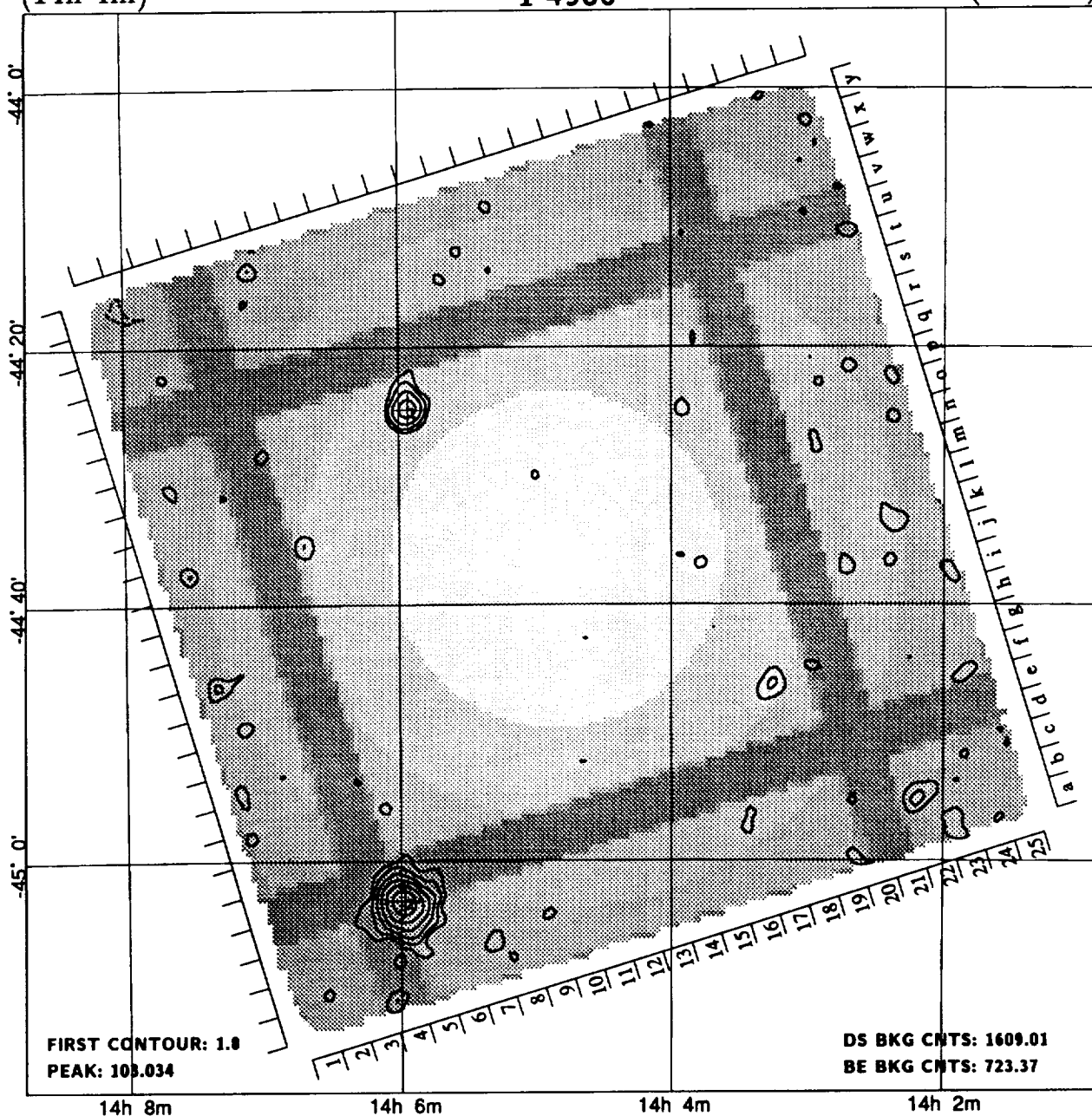
DATE: 1980/356 - 1980/356  
 LIVETIME: 4813.1s  
 ROLL ANGLE:  $-126.7^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS: LS

(14h 4m)

I 4986

(14h 4m)



## CEN BRIGHT PATCH #3

FIELD CENTER:  $14^{\text{h}}04^{\text{m}}48.0^{\text{s}}$   $-44^{\circ}35'59''$  (B1950)  
 $14^{\text{h}}07^{\text{m}}56.4^{\text{s}}$   $-44^{\circ}50'13''$  (J2000)  
 $l: 316.91$   $b: 15.95$

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 1303.8s  
 ROLL ANGLE:  $-106.9^{\circ}$

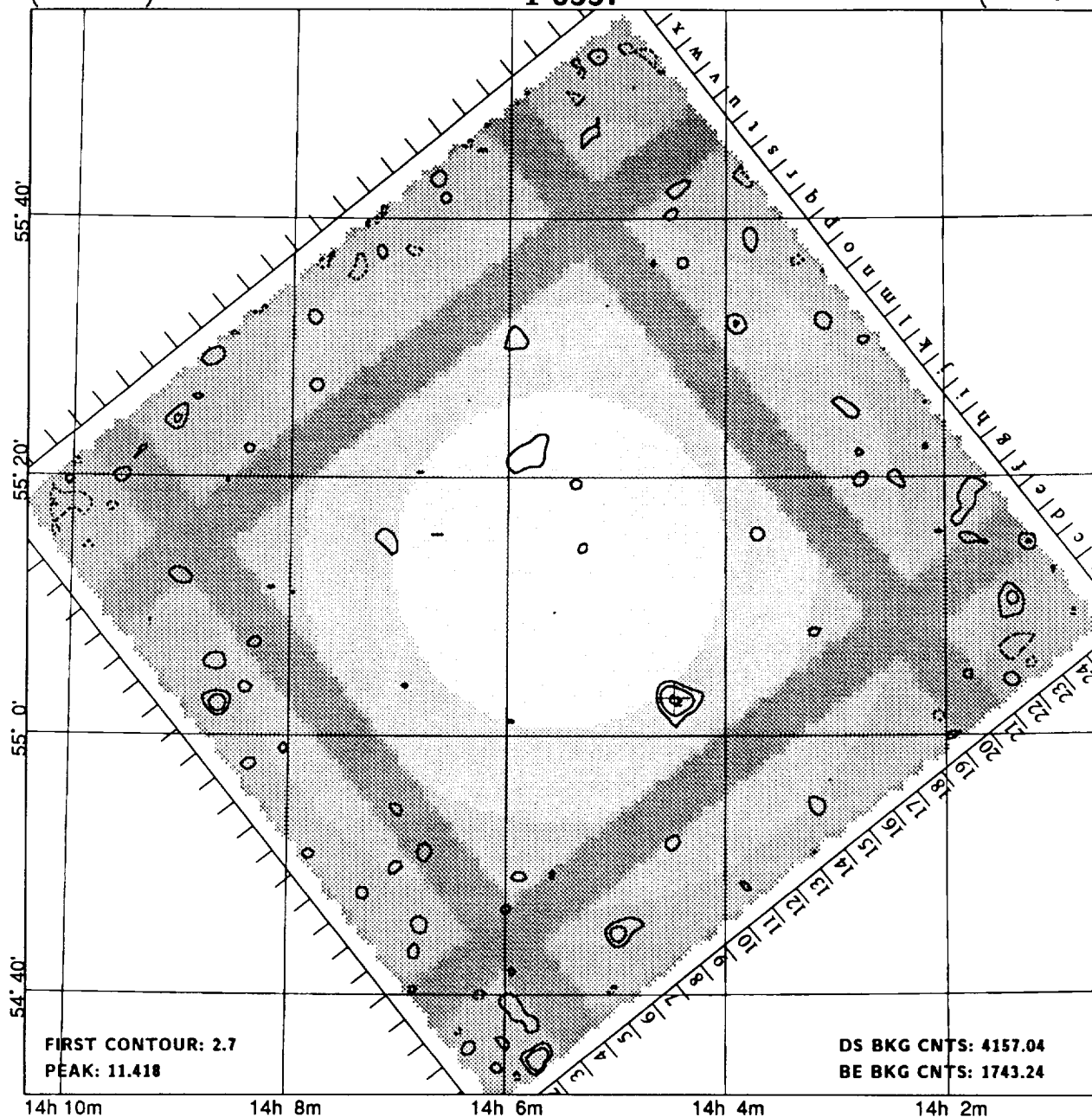
NH:  $9.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3193	1	14 05 56.0	-44 24 52	50	0.076	0.011	55.9	5.1	7.2	1.0	0	16.6	AH	
3194	2	14 05 58.3	-45 03 04	47	*0.405	0.029	192.4	2.6	13.8	1.3	1308	29.5	AH	S

(14h 5m)

I 8337

(14h 5m)



## NGC 5485, STRUCTURE OF PROLATE ELLIPTICAL GALAXIES

FIELD CENTER:  $14^{\text{h}}05^{\text{m}}30.0^{\text{s}}$   $55^{\circ}14'11''$  (B1950)  
 $14^{\text{h}}07^{\text{m}}13.5^{\text{s}}$   $54^{\circ}59'58''$  (J2000)  
 $l: 101.79$   $b: 58.91$

DATE: 1980/356 - 1980/356

NH:  $1.3\text{E}+20$ 

LIVETIME: 3368.6s

REF/ID:

ROLL ANGLE:  $-128.7^{\circ}$ 

FIELD FLAGS:

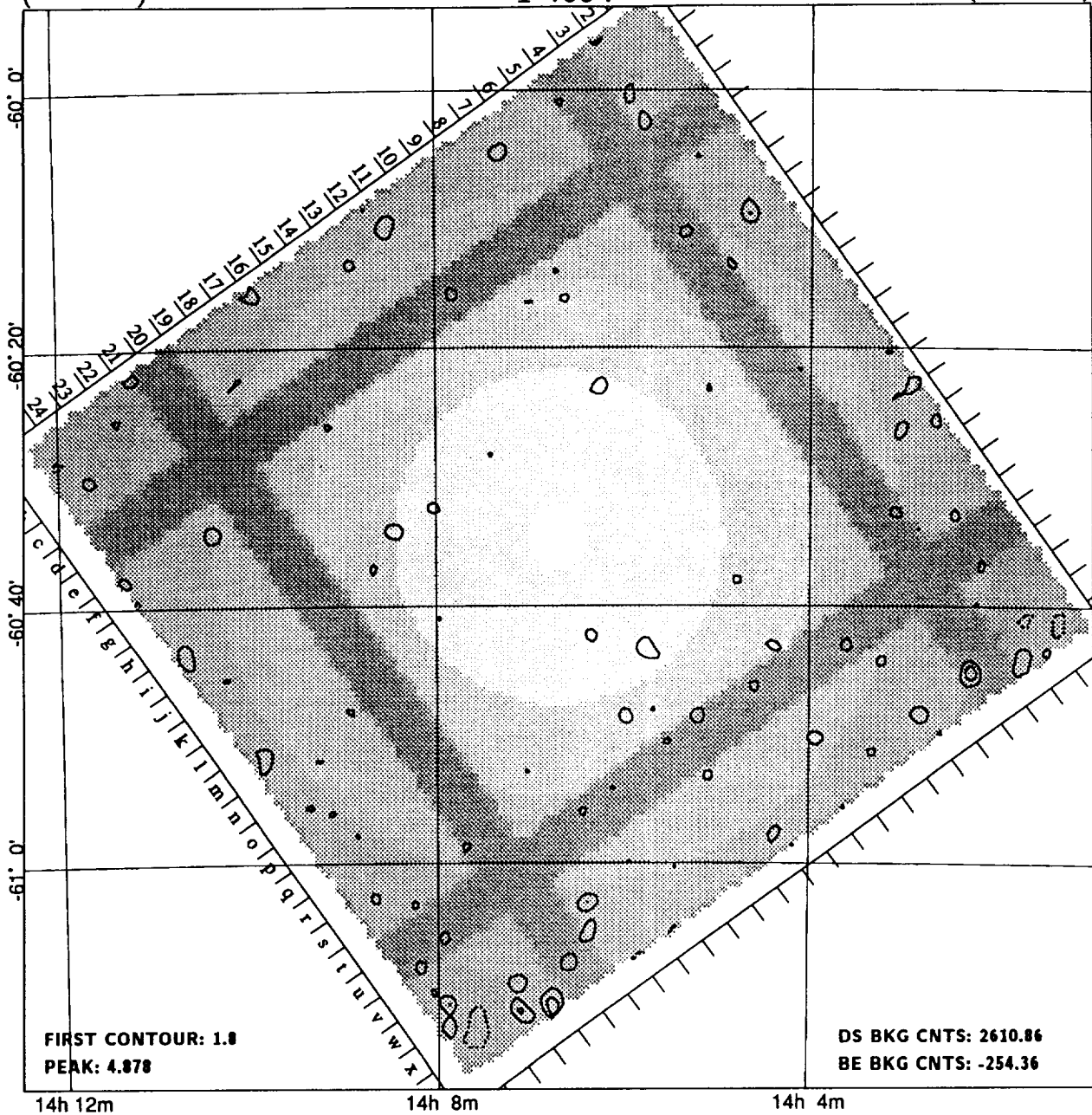
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3190	1	14 04 28.2	55 02 55	41	0.0194	0.0035	39.8	11.2	5.6	0.9	0	14.3	H	



(14h 6m)

I 4094

(14h 6m)



FIELD CENTER:  $14^{\text{h}}06^{\text{m}}41.0^{\text{s}}$   $-60^{\circ}35'35''$  (B1950)  
 $14^{\text{h}}10^{\text{m}}18.1^{\text{s}}$   $-60^{\circ}49'44''$  (J2000)  
 $l: 312.40$   $b: 0.59$

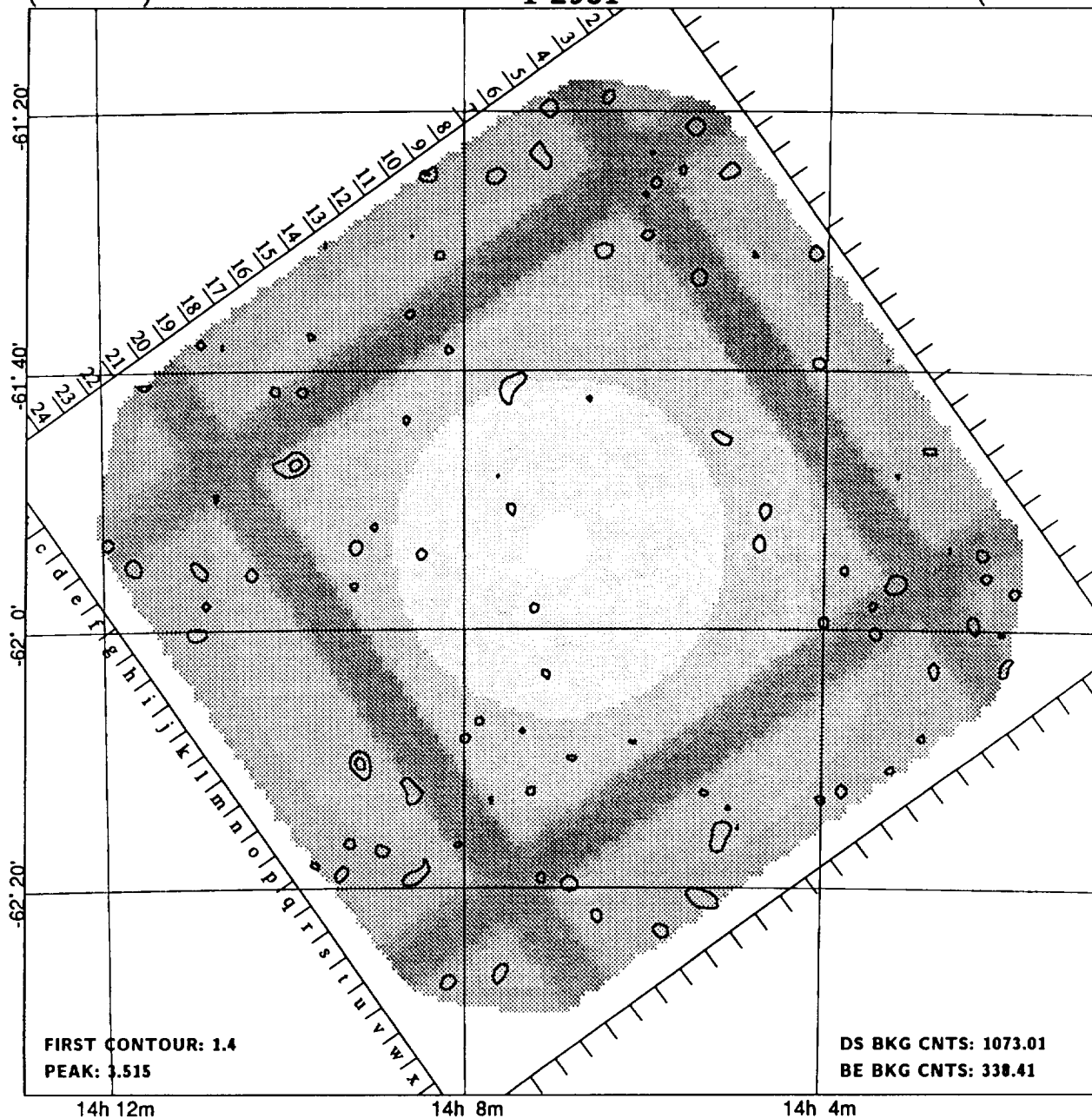
DATE: 1979/240 - 1979/240  
 LIVETIME: 2115.7s  
 ROLL ANGLE:  $54.6^{\circ}$

NH:  $1.4\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

(14h 6m)

I 2981

(14h 6m)



MX AND ARIEL SOURCES: MX1406-61

FIELD CENTER:  $14^{\text{h}}06^{\text{m}}55.0^{\text{s}}$   $-61^{\circ}53'59''$  (B1950)  
 $14^{\text{h}}10^{\text{m}}35.7^{\text{s}}$   $-62^{\circ}08'08''$  (J2000)  
 $l: 312.04$   $b: -0.67$

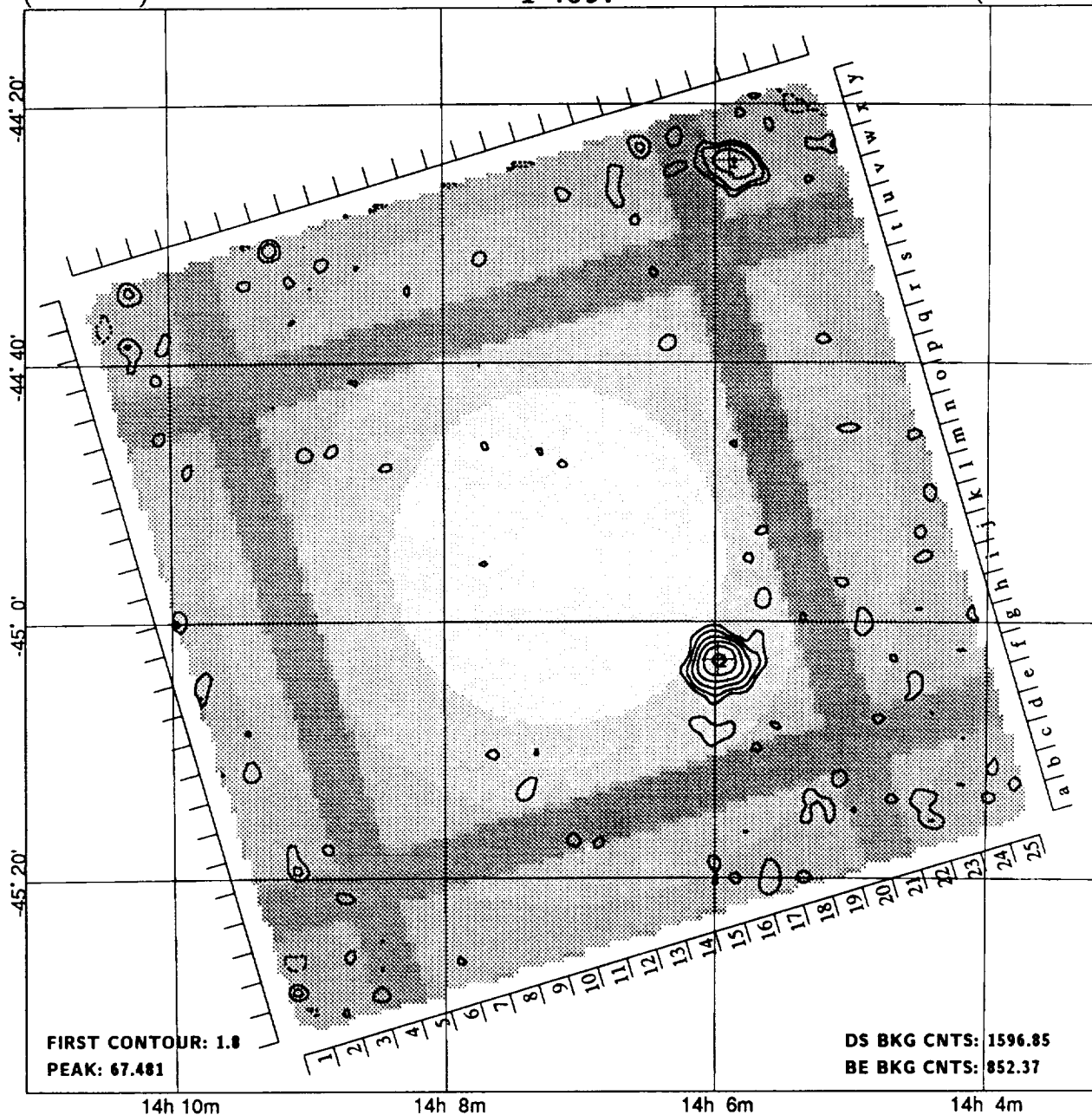
DATE: 1979/240 - 1979/240  
 LIVETIME: 869.5s  
 ROLL ANGLE:  $54.5^{\circ}$

NH:  $1.3\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

(14h 7m)

I 4097

(14h 7m)



## H1409-45 POSITION

FIELD CENTER:  $14^{\text{h}}07^{\text{m}}07.0^{\text{s}}$   $-44^{\circ}54'29''$  (B1950)  
 $14^{\text{h}}10^{\text{m}}16.4^{\text{s}}$   $-45^{\circ}08'38''$  (J2000)  
 $l: 317.22$   $b: 15.53$

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 1294.0s  
 ROLL ANGLE:  $-106.4^{\circ}$

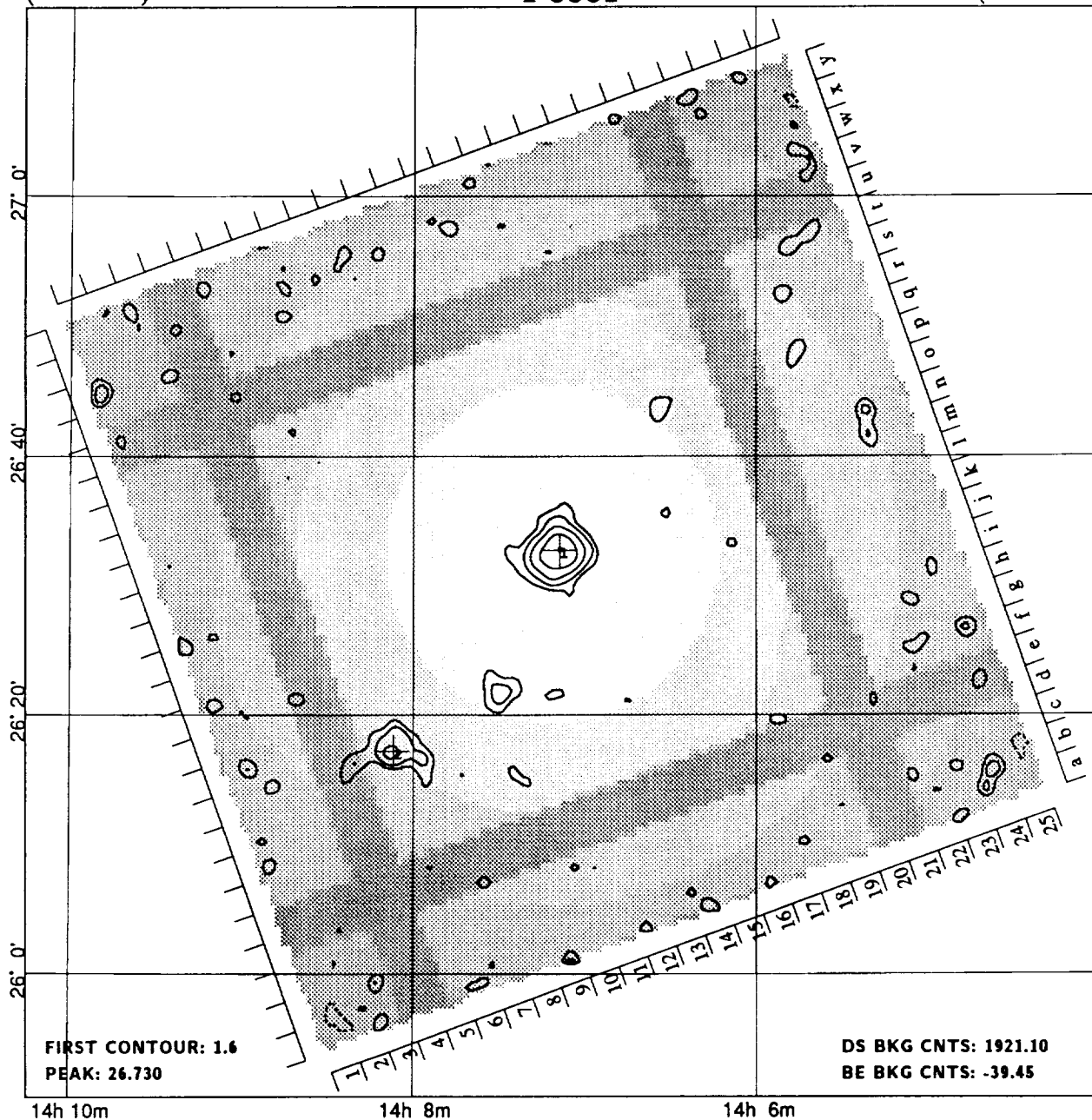
NH:  $1.0\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3193	1	14 05 53.7	-44 24 22	55	*0.044	0.012	16.6	3.4	3.7	1.9	805	32.3	AH	
3194	2	14 05 58.7	-45 02 57	38	0.281	0.019	216.2	4.8	14.5	1.3	0	14.7	AH	S

(14h 7m)

I 5381

(14h 7m)



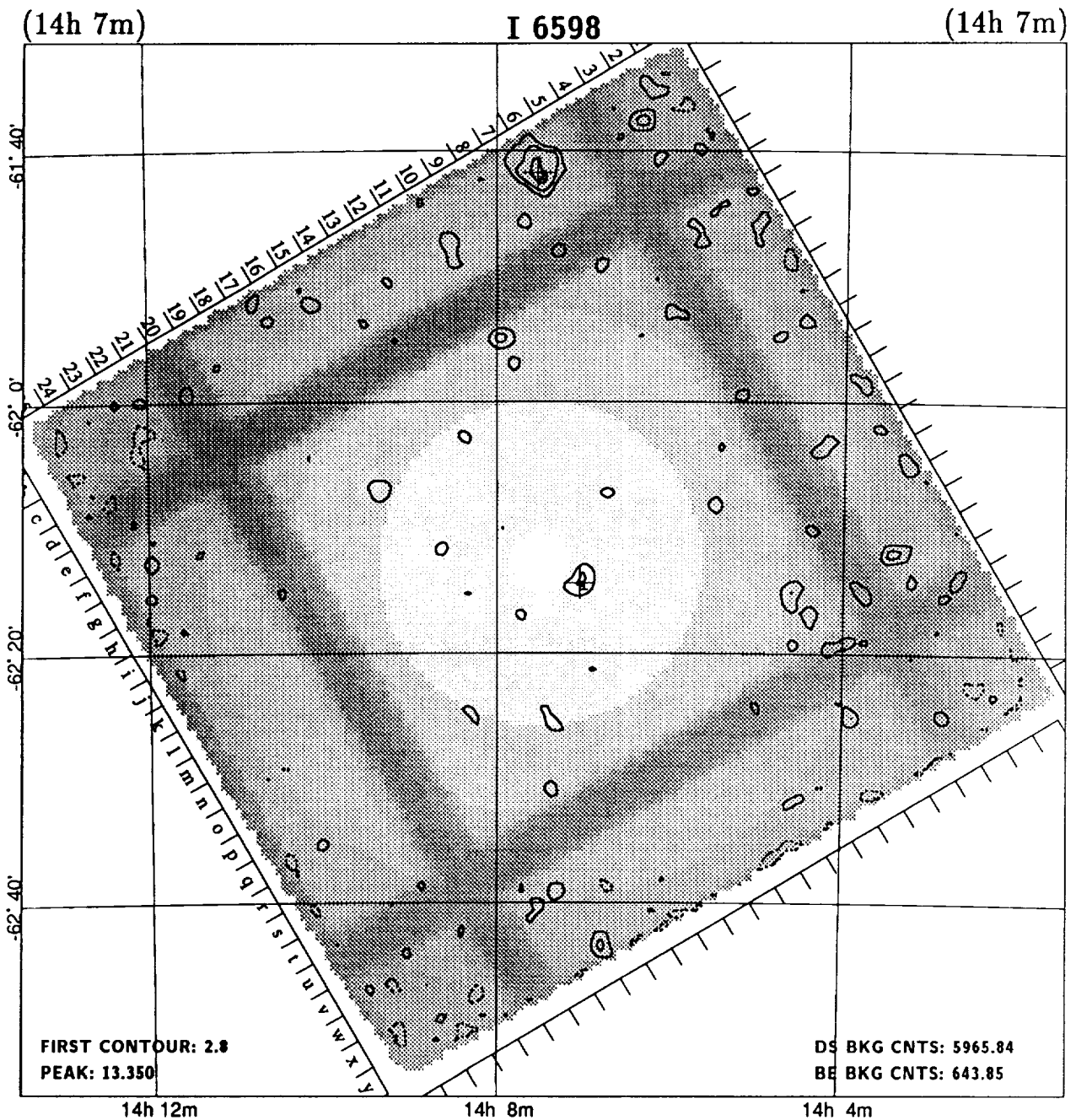
## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $14^{\text{h}}07^{\text{m}}07.9^{\text{s}}$   $26^{\circ}32'32''$  (B1950)  
 $14^{\text{h}}09^{\text{m}}24.0^{\text{s}}$   $26^{\circ}18'23''$  (J2000)  
 $l: 34.67$   $b: 72.59$

DATE: 1981/ 17 - 1981/ 17  
 LIVETIME: 1556.7s  
 ROLL ANGLE:  $-109.8^{\circ}$

NH:  $1.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3196	1	14 07 08.7	26 32 39	31	0.1072	0.0098	124.4	4.6	10.9	1.7	0	0.6	H	Q
3200	2	14 08 06.9	26 17 12	52	0.0234	0.0058	18.9	3.1	4.0	1.7	0	20.2	H	



1407-6213, GALACTIC PLANE SURVEY

FIELD CENTER:  $14^h 07^m 26.8^s$   $-62^\circ 13' 29''$  (B1950)  
 $14^h 11^m 08.7^s$   $-62^\circ 27' 36''$  (J2000)  
 $l: 312.00$   $b: -1.00$

DATE: 1980/233 - 1980/233  
 LIVETIME: 4834.3s  
 ROLL ANGLE:  $59.5^\circ$

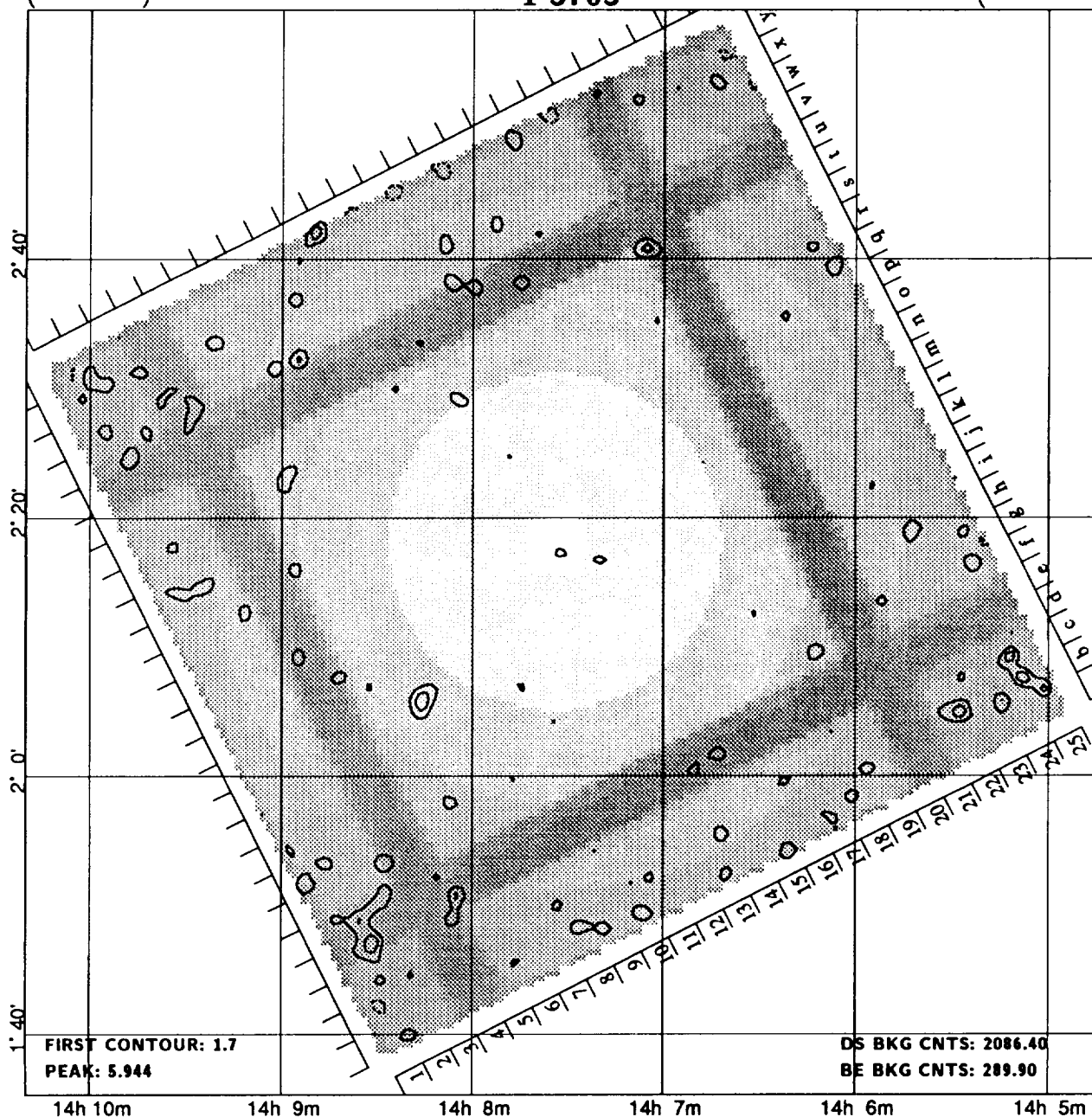
NH:  $1.2E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3195	1	14 07 02.4	-62 14 28	41	0.0067	0.0018	23.6	16.4	3.7	0.8	0	2.7	H	
3198	2	14 07 32.0	-61 41 45	55	0.0169	0.0037	27.1	8.9	4.5	1.4	0	31.9	H	

(14h 7m)

I 5705

(14h 7m)



FIELD CENTER:  $14^{\text{h}}07^{\text{m}}32.0^{\text{s}}$   $02^{\circ}17'15''$  (B1950)  
 $14^{\text{h}}10^{\text{m}}04.4^{\text{s}}$   $02^{\circ}03'07''$  (J2000)  
 $l: 343.17$   $b: 58.64$

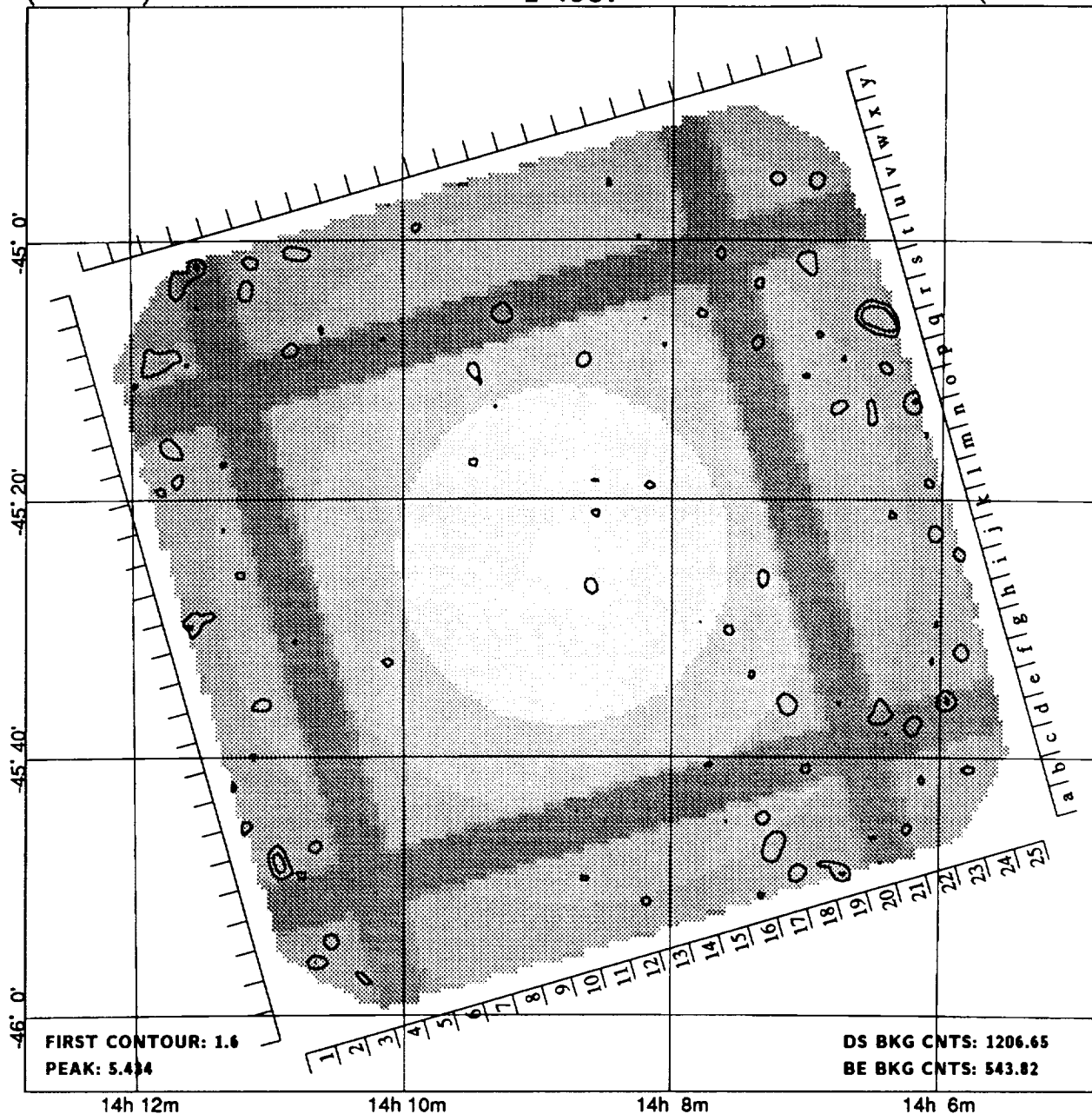
DATE: 1980/ 18 - 1980/ 18  
 LIVETIME: 1690.7s  
 ROLL ANGLE:  $-116.8^{\circ}$

NH:  $2.6\text{E}+20$   
 REF/ID: I  
 FIELD FLAGS:

(14h 8m)

I 4987

(14h 8m)



CEN BRIGHT PATCH #4

FIELD CENTER:  $14^{\text{h}}08^{\text{m}}48.0^{\text{s}}$   $-45^{\circ}23'59''$  (B1950)  
 $14^{\text{h}}11^{\text{m}}58.4^{\text{s}}$   $-45^{\circ}38'04''$  (J2000)  
 $l: 317.36$   $b: 14.97$

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 977.8s  
 ROLL ANGLE:  $-106.0^{\circ}$

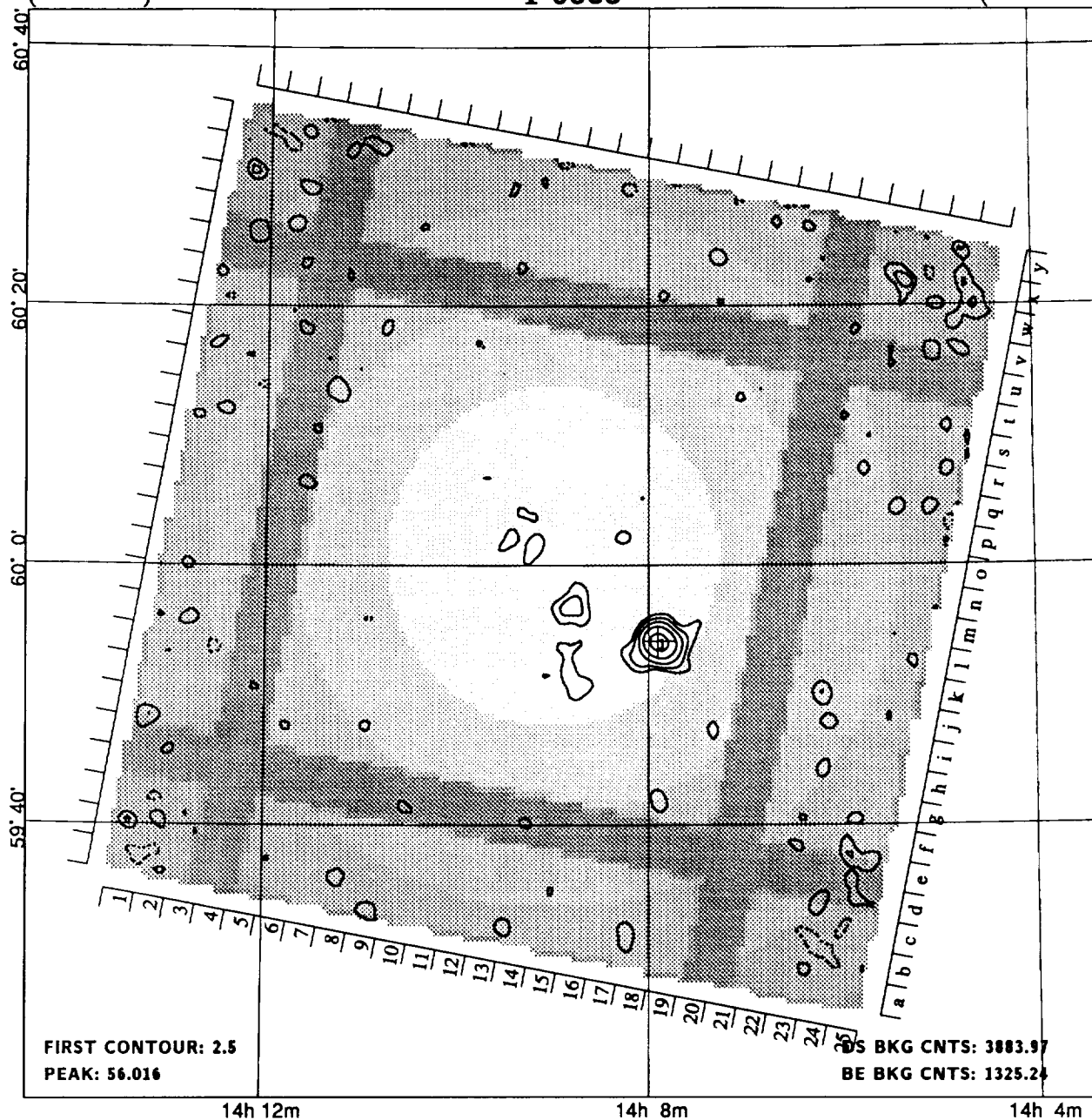
NH:  $1.2\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:



(14h 8m)

I 6883

(14h 8m)



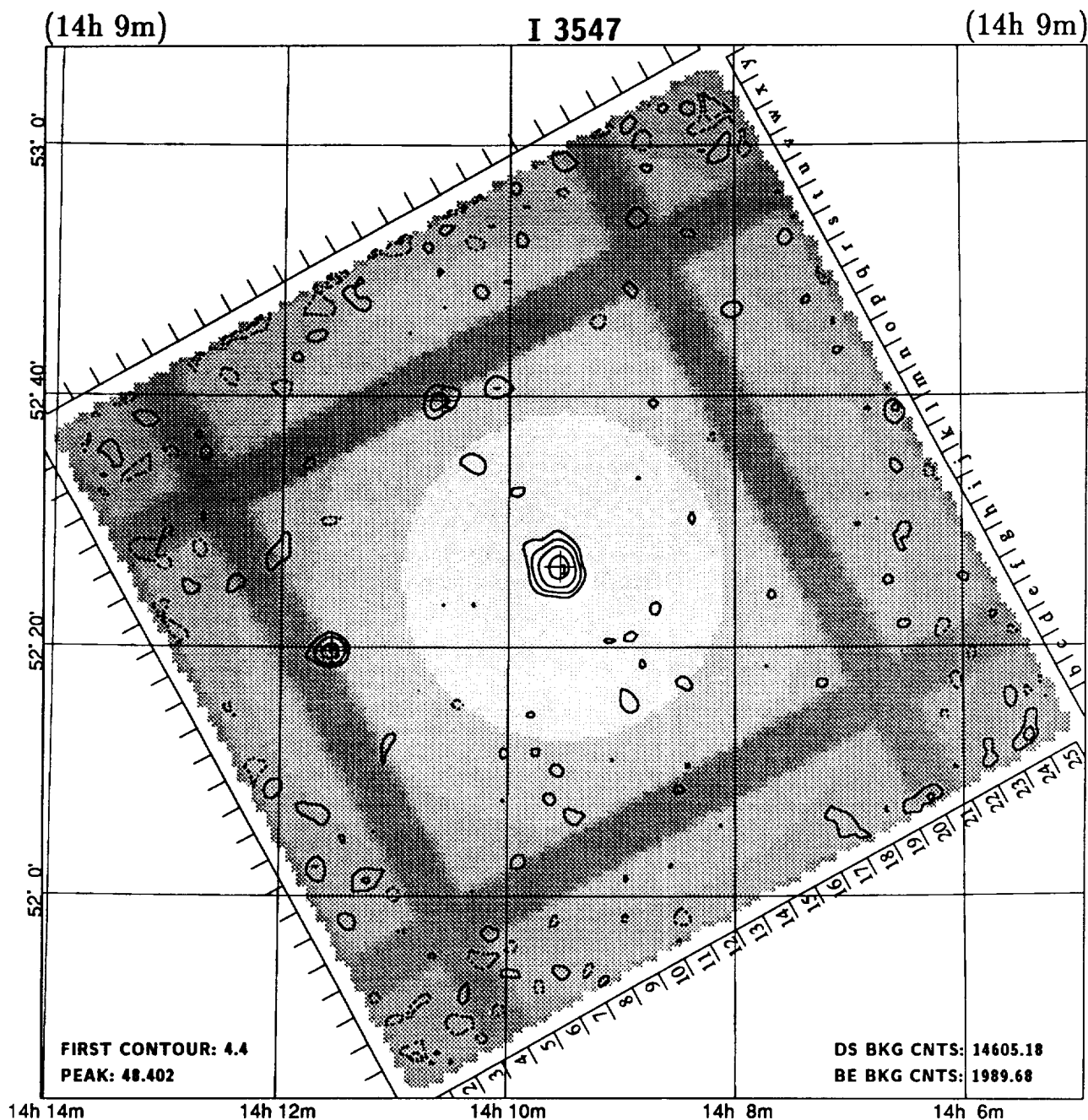
A1877, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $14^{\text{h}}08^{\text{m}}54.0^{\text{s}}$   $60^{\circ}00'59''$  (B1950)  
 $14^{\text{h}}10^{\text{m}}26.0^{\text{s}}$   $59^{\circ}46'53''$  (J2000)  
 $l: 105.84$   $b: 54.65$

DATE: 1981/ 40 - 1981/ 40  
 LIVETIME: 3147.3s  
 ROLL ANGLE:  $-79.3^{\circ}$

NH:  $1.6\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3199	1	14 07 54.3	59 54 09	38	0.0900	0.0068	187.0	12.0	13.3	1.1	0	10.0	H



### 3C 295, CLUSTER SPECTRA EVOLUTION

FIELD CENTER:  $14^{\text{h}}09^{\text{m}}30.0^{\text{s}}$   $52^{\circ}25'58''$  (B1950)  
 $14^{\text{h}}11^{\text{m}}17.1^{\text{s}}$   $52^{\circ}11'54''$  (J2000)  
 $l: 97.52$   $b: 60.81$

DATE: 1980/ 2 - 1980/ 3  
 LIVETIME: 11835.1s  
 ROLL ANGLE:  $-118.9^{\circ}$

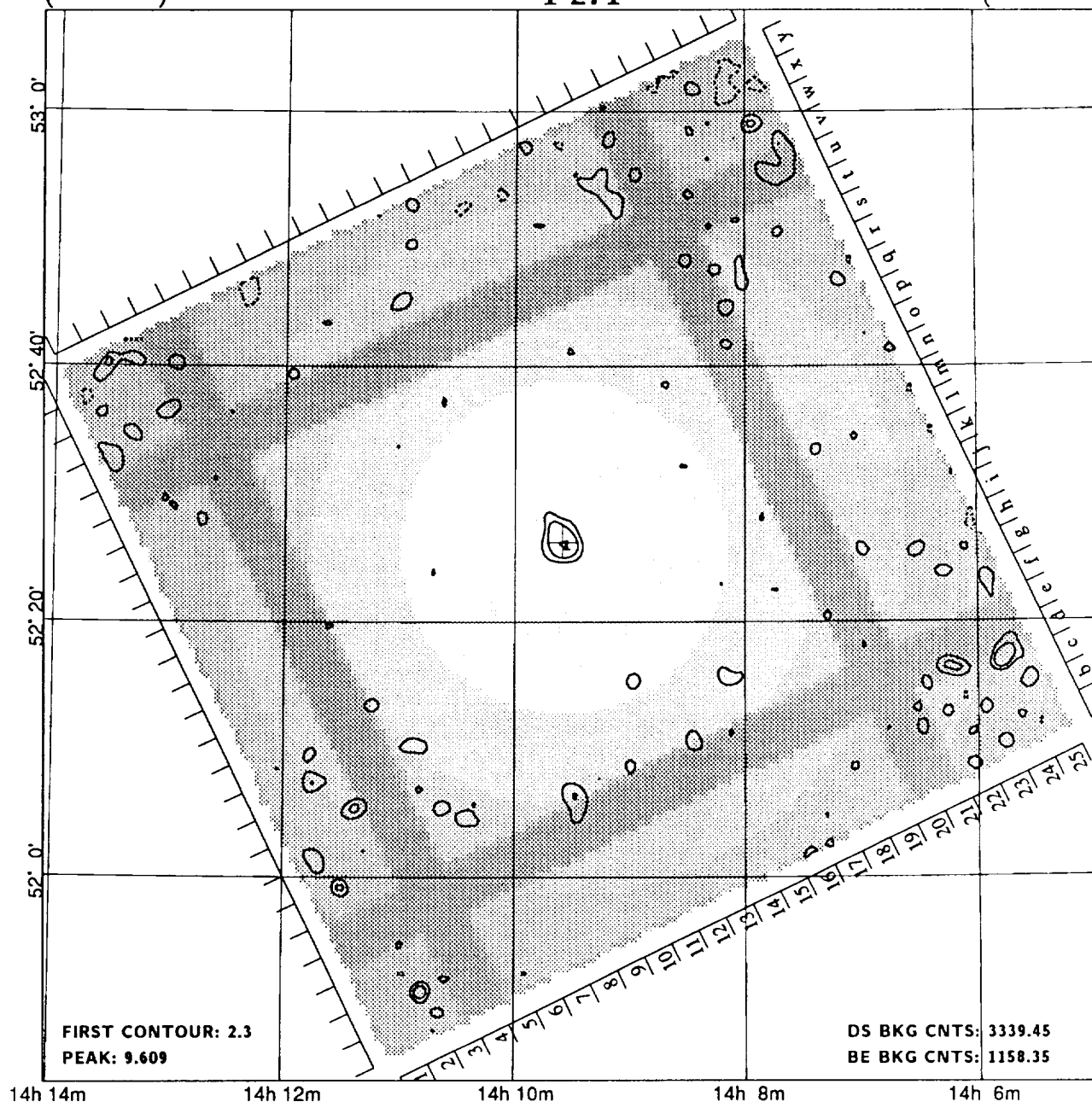
NH:  $1.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3202	1	14 09 32.7	52 26 24	31	0.0252	0.0018	222.0	41.0	13.7	1.3	0	0.8	AH	*
3204	2	14 10 36.0	52 39 39	56	*0.0056	0.0012	36.8	27.2	4.6	1.1	704	16.7	H	
3208	3	14 11 33.3	52 19 42	50	*0.0097	0.0015	59.4	23.6	6.5	0.8	906	20.1	H	

(14h 9m)

I 271

(14h 9m)



## 3C 295 CLUSTER EVOLUTION

FIELD CENTER:  $14^h 09^m 30.0^s$   $52^\circ 25' 59''$  (B1950)  
 $14^h 11^m 17.1^s$   $52^\circ 11' 55''$  (J2000)  
 $l: 97.52$   $b: 60.81$

DATE: 1979/ 6 - 1979/ 6  
 LIVETIME: 2706.1s  
 ROLL ANGLE:  $-115.8^\circ$

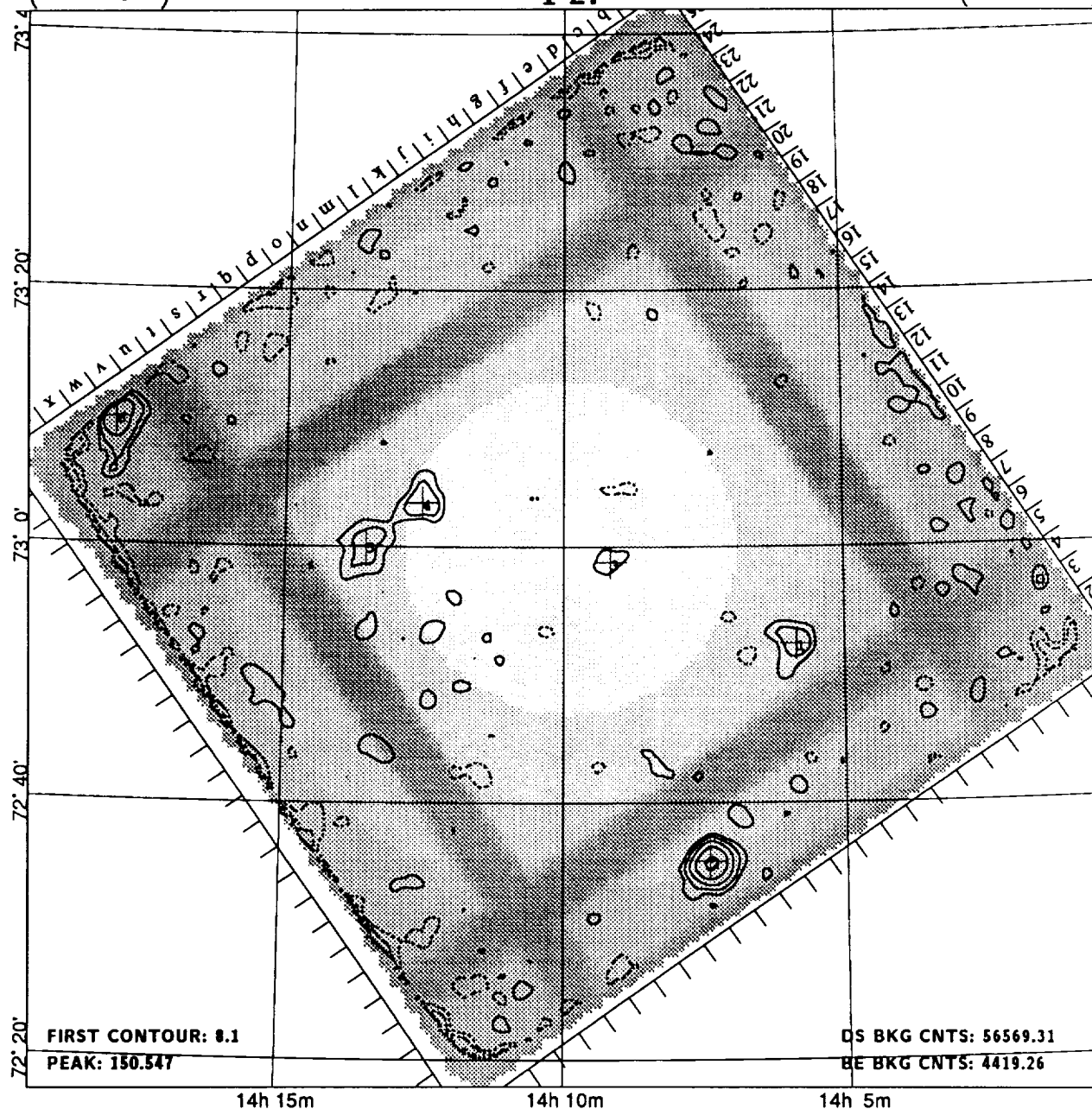
NH:  $1.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3202	1	14 09 35.2	52 26 16	35	0.0229	0.0037	46.2	10.8	6.1	1.0	0	1.0	AH	*

(14h 10m)

I 27

(14h 10m)



## UMI DEEP SURVEY

FIELD CENTER:  $14^h 10^m 00.0^s$   $72^\circ 59' 59''$  (B1950)  
 $14^h 10^m 36.9^s$   $72^\circ 45' 55''$  (J2000)  
 $l: 115.03$   $b: 43.13$

DATE: 1979/267 - 1979/269

NH:  $2.2E+20$ 

LIVETIME: 45839.6s

REF/ID:

ROLL ANGLE:  $145.2^\circ$ 

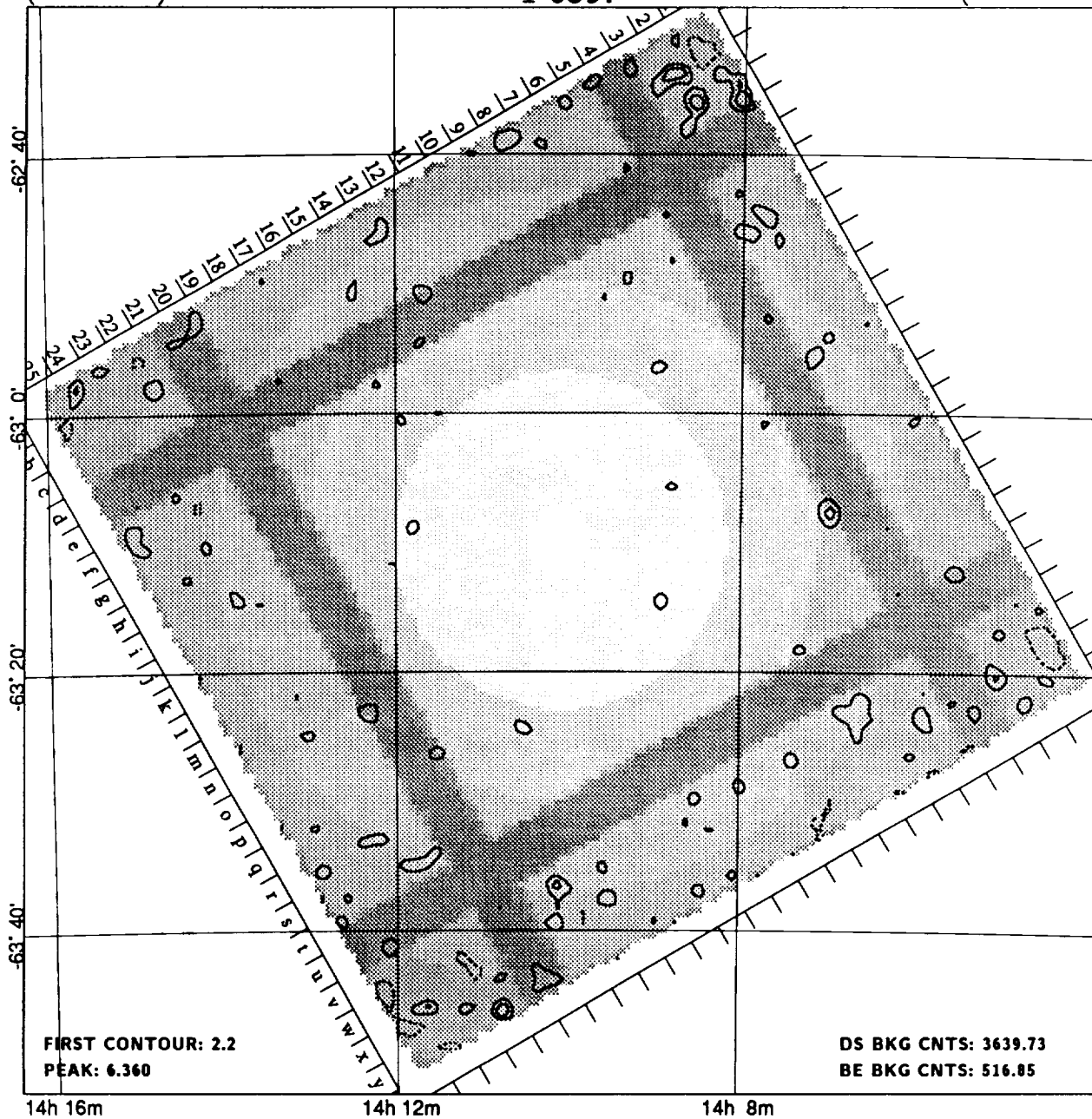
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3192	1	14 05 51.1	72 52 26	51	0.00344	0.00057	82.8	107.2	6.0	1.2	0	19.7	H
3197	2	14 07 24.5	72 35 29	47	0.0188	0.0011	346.4	95.6	16.5	1.2	0	27.0	H
3201	3	14 09 09.8	72 58 47	36	0.00166	0.00043	55.4	154.6	3.8	0.6	0	3.5	
3212	4	14 12 33.3	73 03 29	41	0.00400	0.00053	116.8	125.2	7.5	1.1	0	11.6	H
3218	5	14 13 33.4	73 00 06	52	0.00325	0.00053	85.5	112.5	6.1	1.5	0	15.3	H
3252	6	14 18 05.1	73 09 52	56	0.0113	0.0013	114.2	70.8	8.4	1.4	600	36.7	EH

(14h 10m)

I 6597

(14h 10m)



## 1410-6310, GALACTIC PLANE SURVEY

**FIELD CENTER:**  $14^{\text{h}}10^{\text{m}}05.2^{\text{s}}$   $-63^{\circ}10'40''$  (B1950)  
 $14^{\text{h}}13^{\text{m}}51.3^{\text{s}}$   $-63^{\circ}24'41''$  (J2000)  
 $l: 312.00$   $b: -2.00$

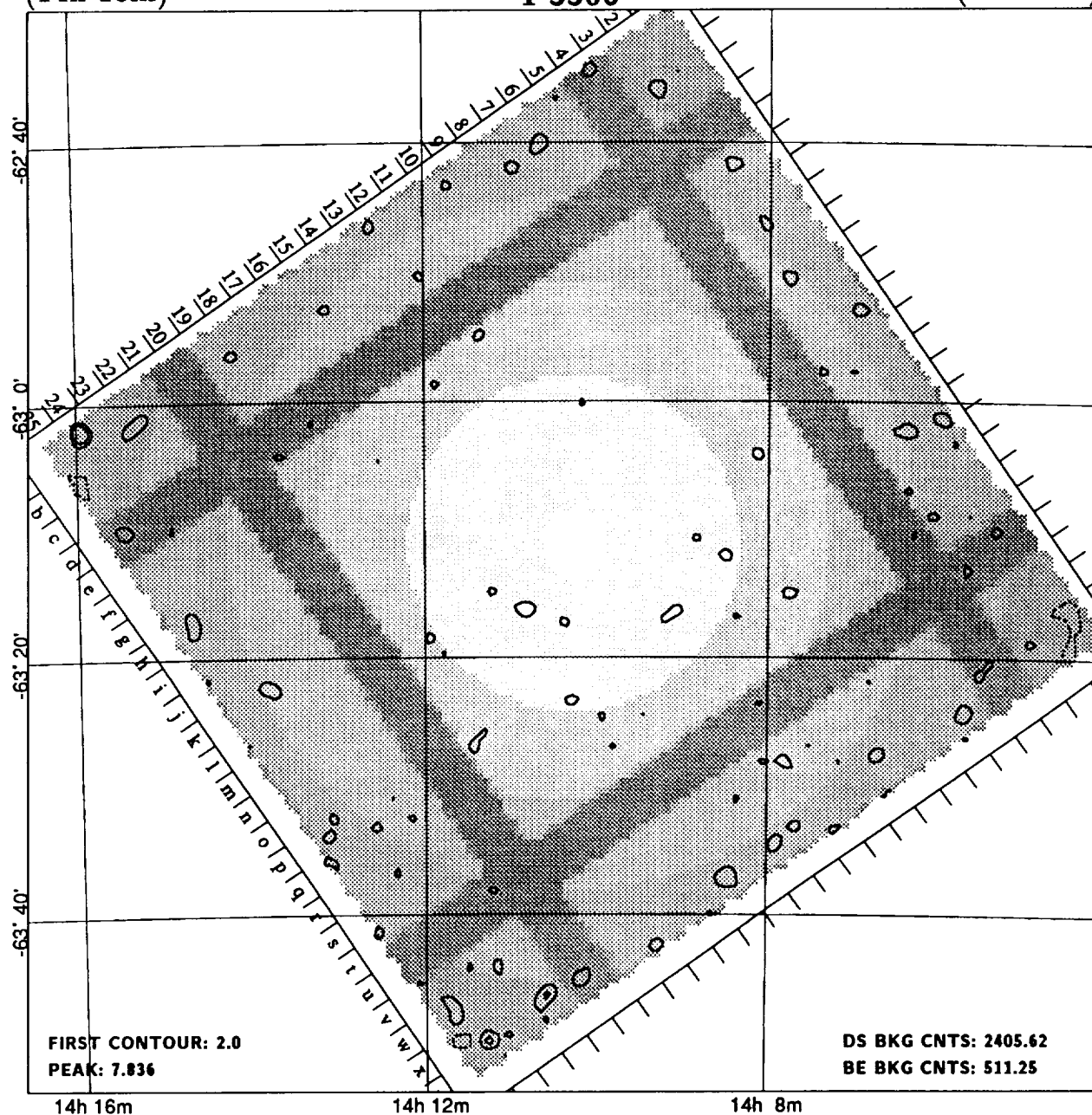
**DATE:** 1980/233 - 1980/233  
**LIVETIME:** 2949.4s  
**ROLL ANGLE:**  $60.1^{\circ}$

**NH:**  $1.2\text{E}+21$   
**REF/ID:**  
**FIELD FLAGS:**

(14h 10m)

I 3306

(14h 10m)



SYMBIOTIC STARS: HE2-106

FIELD CENTER:  $14^h 10^m 22.7^s$   $-63^\circ 11' 44''$  (B1950)  
 $14^h 14^m 09.0^s$   $-63^\circ 25' 44''$  (J2000)  
 $l: 312.03$   $b: -2.03$

DATE: 1979/240 - 1979/240  
 LIVETIME: 1949.4s  
 ROLL ANGLE:  $55.4^\circ$

NH:  $1.2E+21$   
 REF/ID: S  
 FIELD FLAGS:

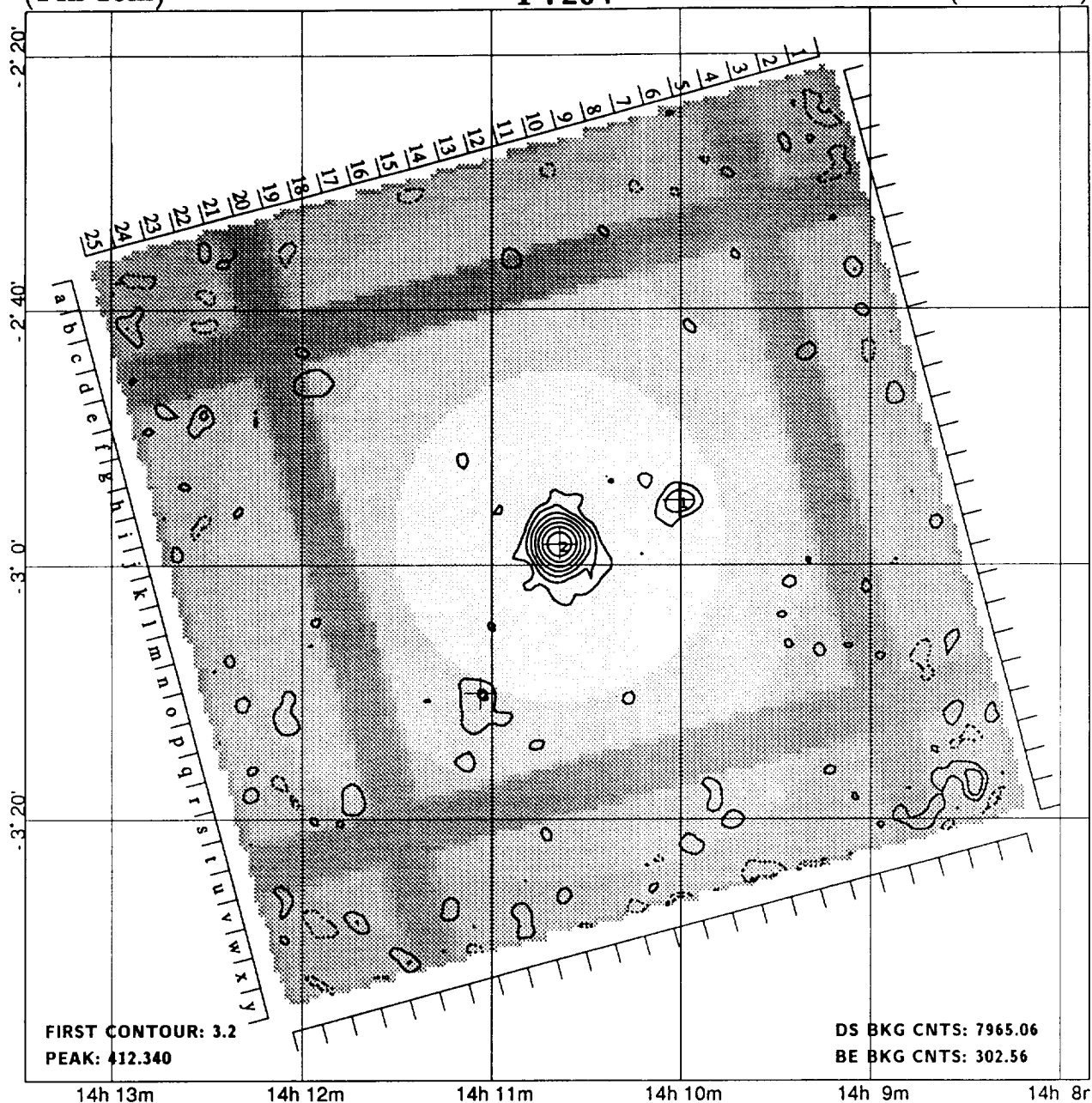
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(14h 10m)

I 7204

(14h 10m)



## N5506, VARIABILITY OF TYPE 2 SEYFERTS

FIELD CENTER:  $14^h 10^m 39.0^s$   $-02^\circ 58' 29''$  (B1950)  
 $14^h 13^m 14.7^s$   $-03^\circ 12' 30''$  (J2000)  
 $l: 339.15$   $b: 53.81$

DATE: 1980/194 - 1980/198  
 LIVETIME: 6454.3s  
 ROLL ANGLE:  $75.1^\circ$

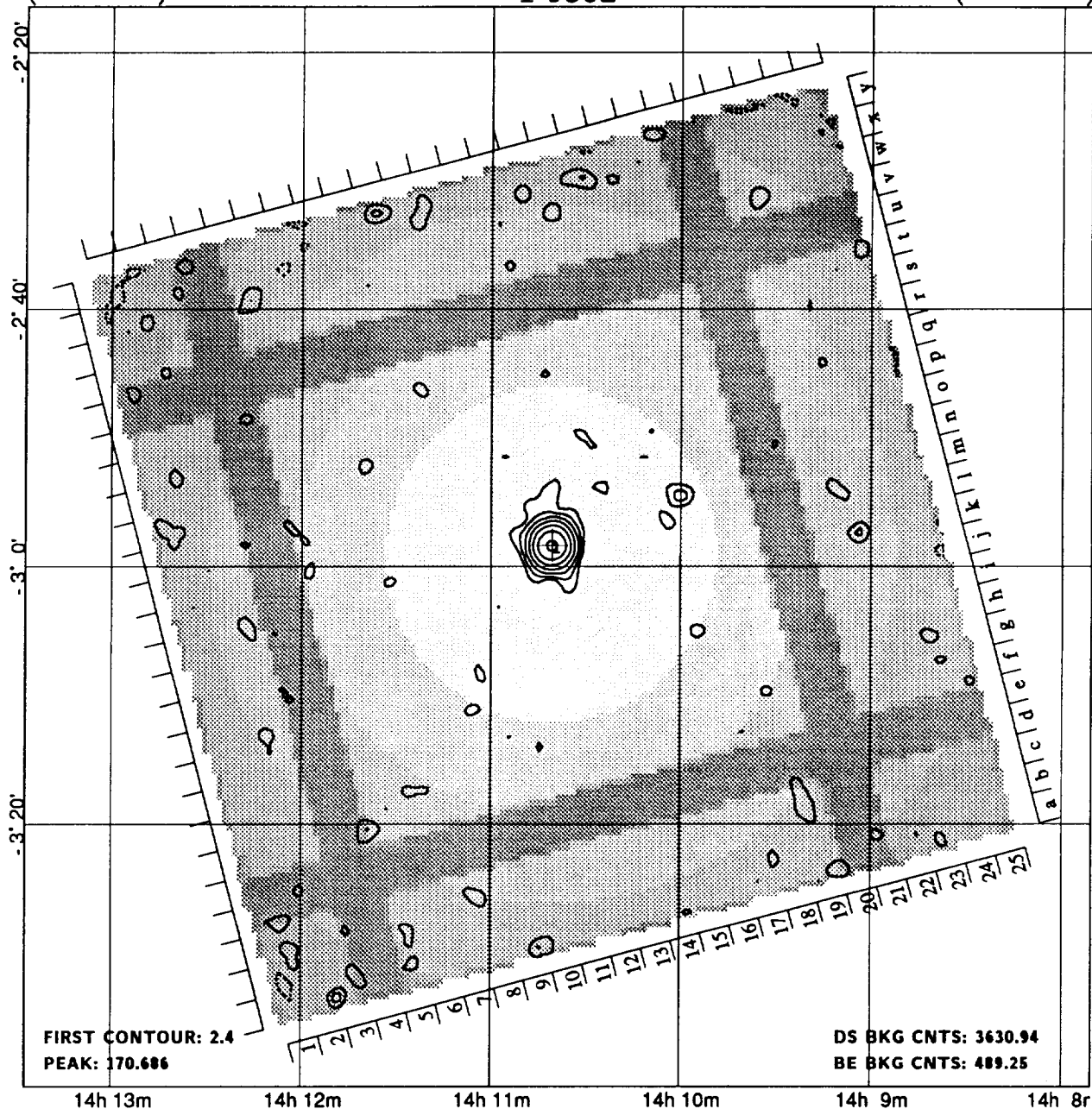
NH:  $3.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3203	1	14 10 00.6	-02 54 54	42	0.0093	0.0018	40.0	18.0	5.3	1.0	0	10.5		
3205	2	14 10 38.5	-02 58 21	31	0.3100	0.0081	1492.0	20.0	38.4	1.1	0	0.2	AH	SY
3206	3	14 11 03.6	-03 10 07	47	0.0072	0.0017	28.4	18.6	4.1	1.4	0	13.2	H	

(14h 10m)

I 9502

(14h 10m)



## N 5506, VARIABILITY OF TYPE 2 SEYFERTS

FIELD CENTER:  $14^h 10^m 39.0^s$   $-02^\circ 58' 29''$  (B1950)  
 $14^h 13^m 14.7^s$   $-03^\circ 12' 30''$  (J2000)  
 $l: 339.15$   $b: 53.81$

DATE: 1981/ 5 - 1981/ 5  
 LIVETIME: 2942.3s  
 ROLL ANGLE:  $-104.8^\circ$

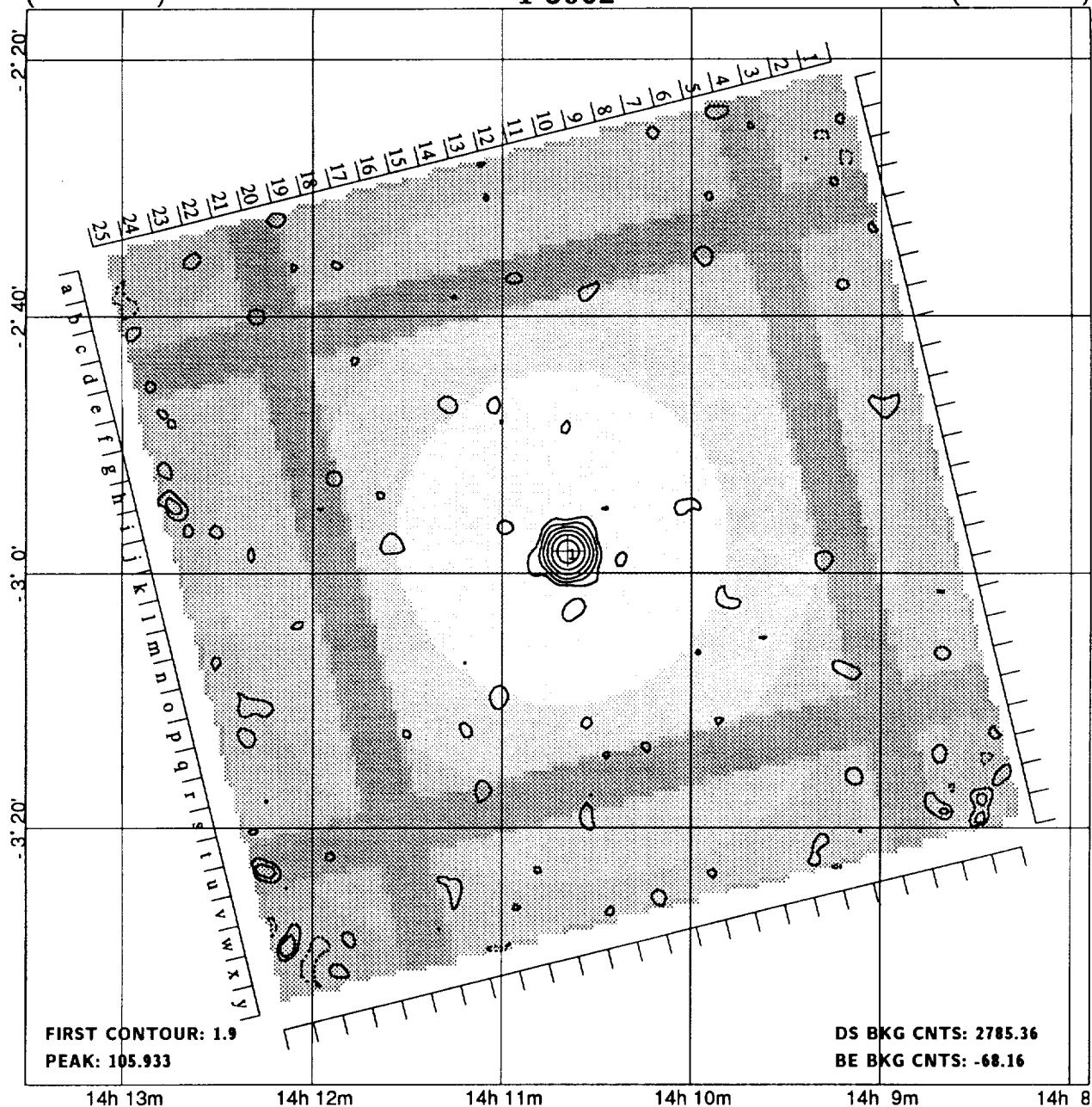
NH:  $3.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3205	1	14 10 40.6	-02 58 22	31	0.316	0.012	692.1	9.9	26.1	1.1	0	0.4	AH	SY

(14h 10m)

I 3062

(14h 10m)



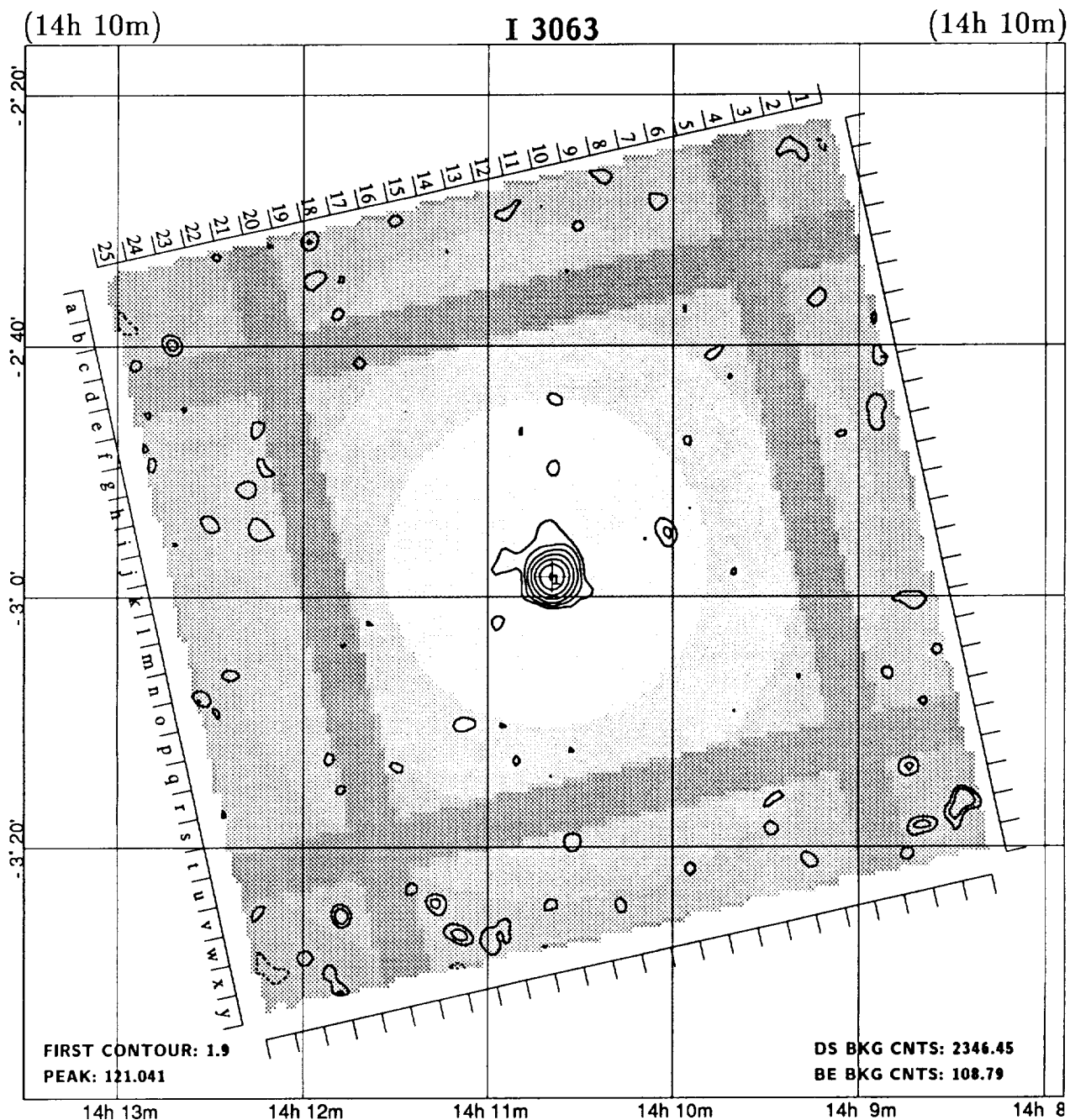
## NGC 5506: NARROW EMISSION LINE GALAXIES I

FIELD CENTER:  $14^h 10^m 42.0^s$   $-02^\circ 57' 59''$  (B1950)  
 $14^h 13^m 17.7^s$   $-03^\circ 12' 00''$  (J2000)  
 $l: 339.17$   $b: 53.81$

DATE: 1979/202 - 1979/202  
 LIVETIME: 2257.1s  
 ROLL ANGLE:  $76.2^\circ$

NH:  $3.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3205	1	14 10 39.2	-02 58 20	31	0.240	0.012	402.8	6.2	19.9	1.1	0	0.7	AH	SY



**NGC 5506: NARROW EMISSION LINE GALAXIESI**

FIELD CENTER:  $14^h 10^m 42.0^s$   $-02^\circ 57' 59''$  (B1950)  
 $14^h 13^m 17.7^s$   $-03^\circ 12' 00''$  (J2000)  
 $l: 339.17$   $b: 53.81$

DATE: 1979/211 - 1979/211  
 LIVETIME: 1901.4s  
 ROLL ANGLE:  $77.5^\circ$

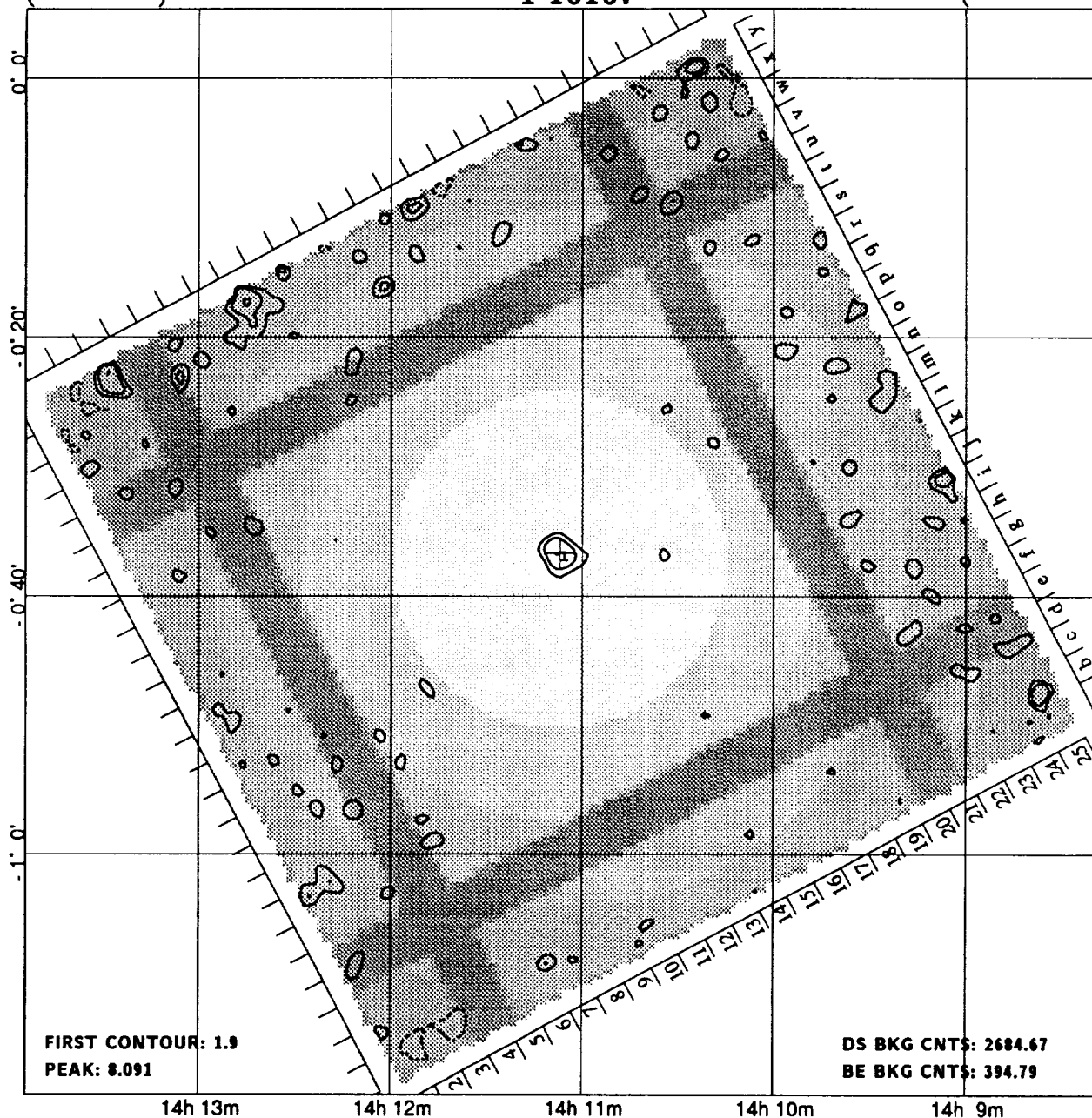
NH:  $3.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3205	1	14 10 39.2	-02 58 23	31	0.329	0.015	464.3	5.7	21.4	1.1	0	0.8	AH	SY

(14h 11m)

I 10107

(14h 11m)



## HR5317, HERTZSPRUNG GAP AND RELATED STARS

FIELD CENTER:  $14^h 11^m 05.9^s$   $-00^\circ 36' 36''$  (B1950)  
 $14^h 13^m 40.1^s$   $-00^\circ 50' 36''$  (J2000)  
 $l: 341.52$   $b: 55.74$

DATE: 1981/ 30 - 1981/ 30  
 LIVETIME: 2175.5s  
 ROLL ANGLE:  $-118.0^\circ$

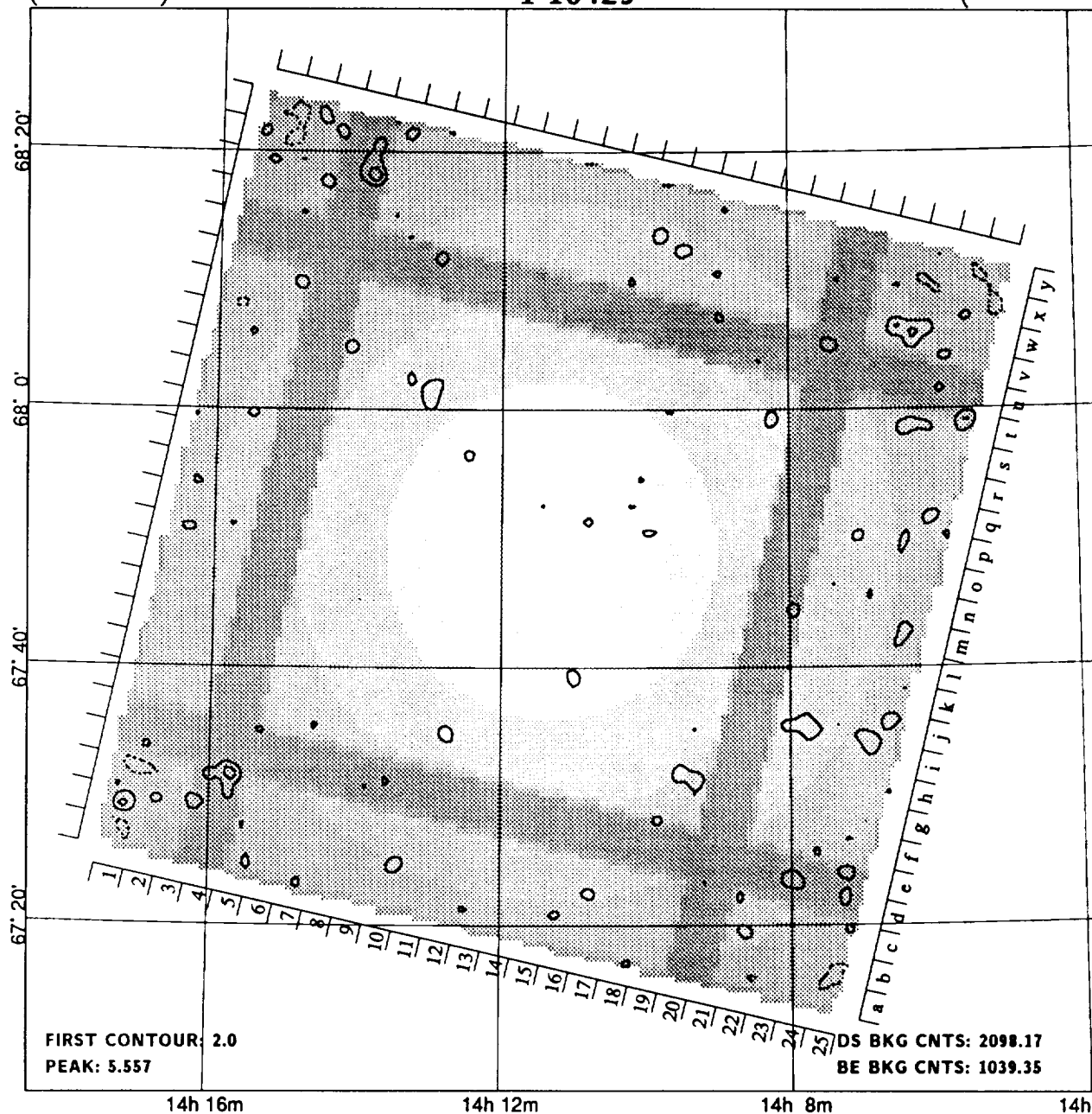
NH:  $3.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3207	1	14 11 07.0	-00 36 42	36	0.0206	0.0040	33.3	7.7	5.2	1.0	0	0.9	H	

(14h 11m)

I 10429

(14h 11m)



## HD124752, CORONAL EMIS FROM YOUNG STARS IN UMA

FIELD CENTER:  $14^h 11^m 10.7^s$   $67^\circ 49' 11''$  (B1950)  
 $14^h 12^m 15.9^s$   $67^\circ 35' 10''$  (J2000)  
 $l: 111.64$   $b: 47.73$

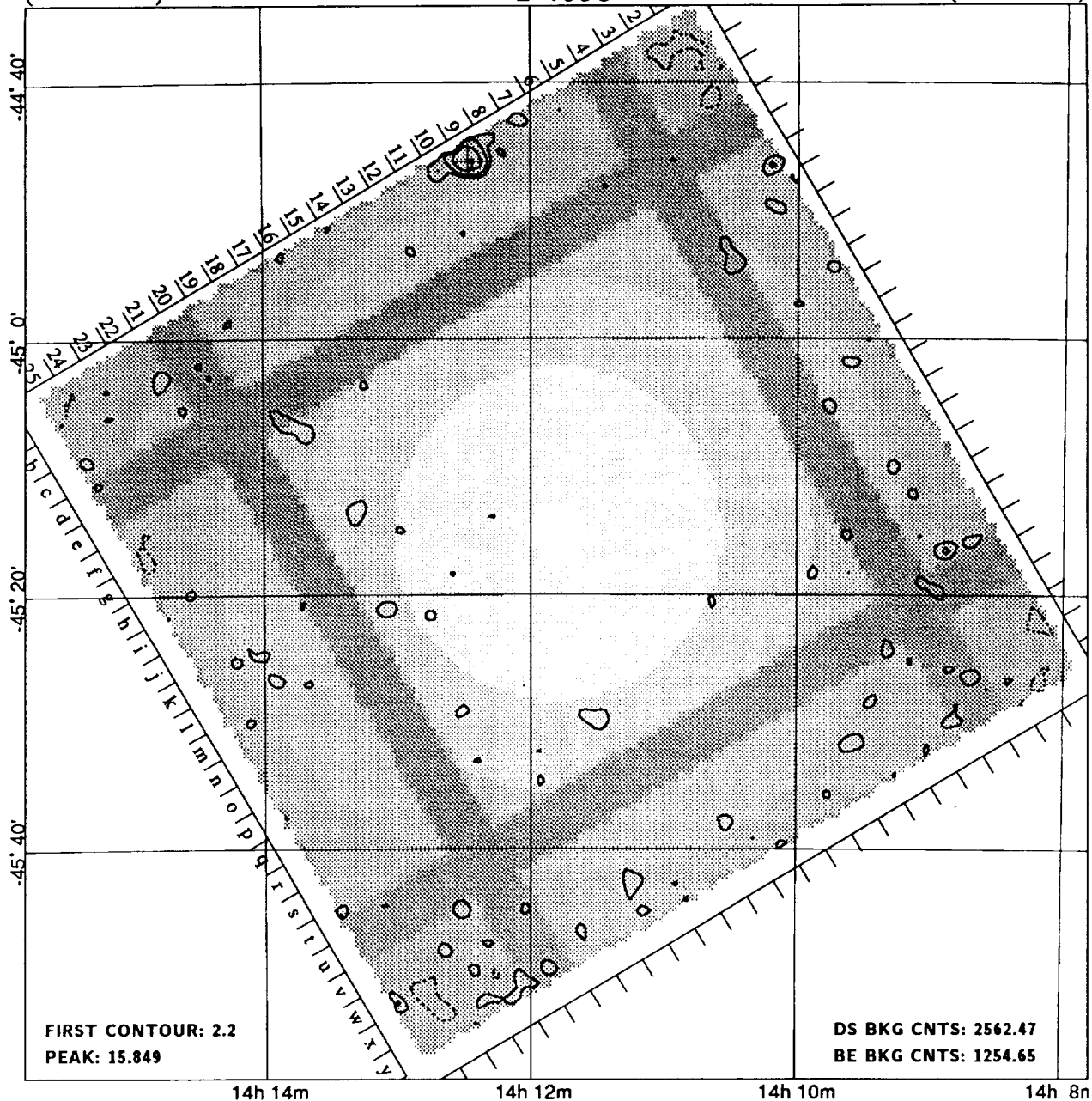
DATE: 1981/ 40 - 1981/ 40  
 LIVETIME: 1700.2s  
 ROLL ANGLE:  $-77.1^\circ$

NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS: L

(14h 11m)

I 4098

(14h 11m)



H1409-45 POSITION

FIELD CENTER:  $14^{\text{h}}11^{\text{m}}48.0^{\text{s}}$   $-45^{\circ}16'05''$  (B1950) $14^{\text{h}}14^{\text{m}}59.0^{\text{s}}$   $-45^{\circ}30'03''$  (J2000) $l: 317.92$   $b: 14.93$ 

DATE: 1979/238 - 1979/238

LIVETIME: 2076.5s

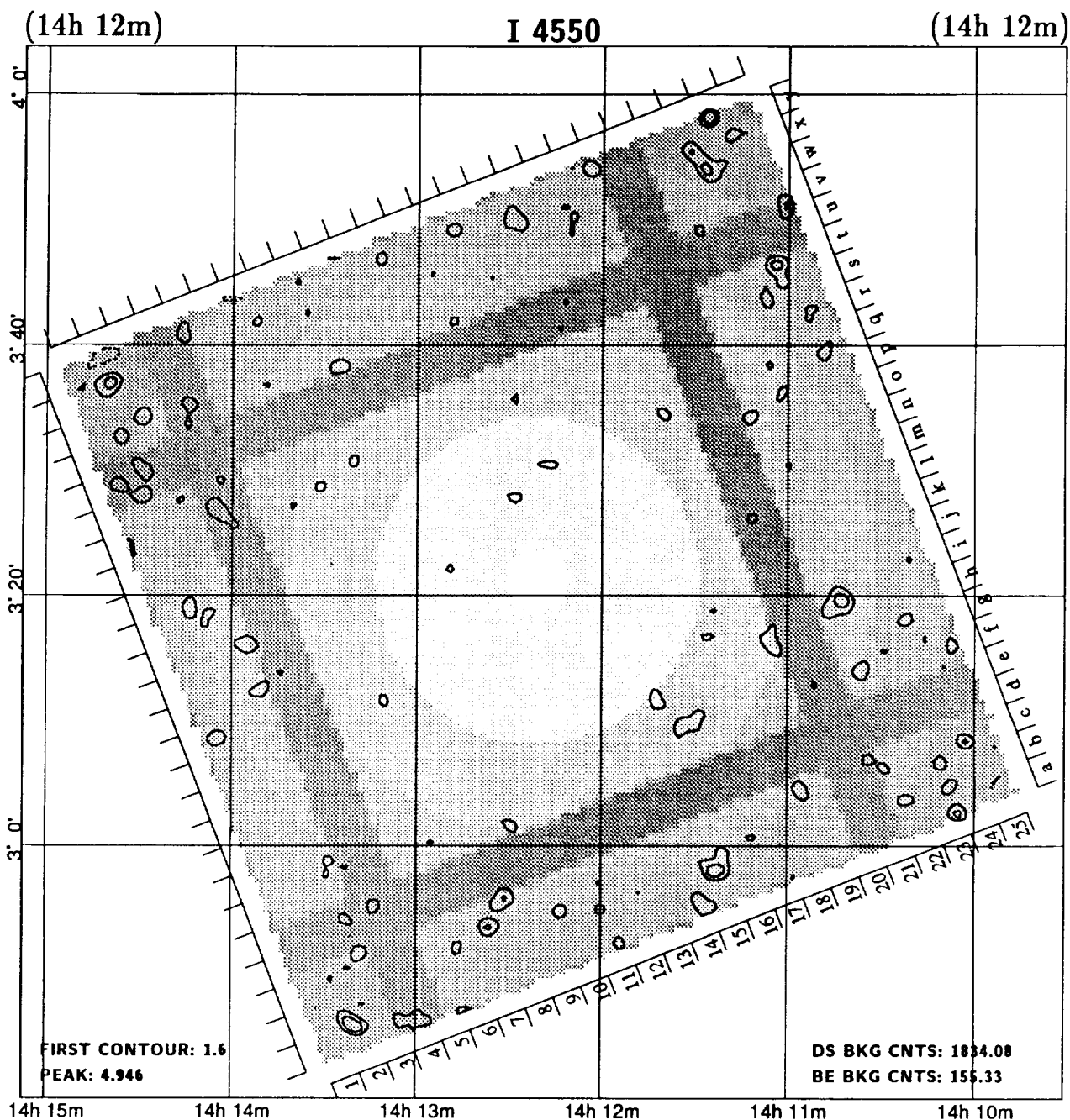
ROLL ANGLE:  $59.5^{\circ}$ NH:  $1.2\text{E}+21$ 

REF/ID:

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3211	1	14 12 28.0	-44 46 11	51	0.0438	0.0083	31.5	4.5	5.2	1.1	400	30.6	H

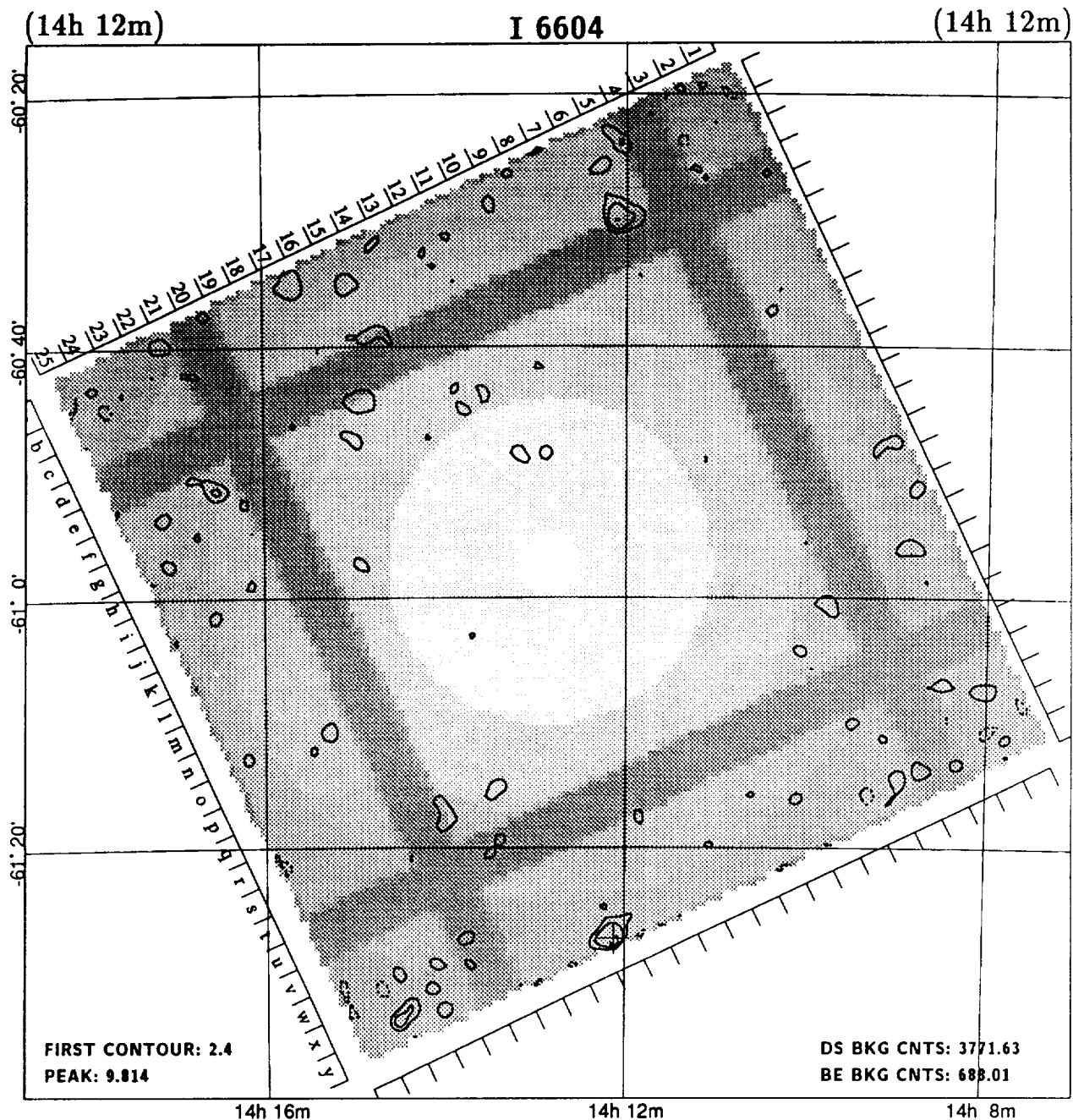




FIELD CENTER:  $14^{\text{h}}12^{\text{m}}19.3^{\text{s}}$   $03^{\circ}21'46''$  (B1950)  
 $14^{\text{h}}14^{\text{m}}50.9^{\text{s}}$   $03^{\circ}07'50''$  (J2000)  
 $l: 346.26$   $b: 58.80$

DATE: 1980/ 17 - 1980/ 17  
 LIVETIME: 1486.2s  
 ROLL ANGLE:  $-111.3^{\circ}$

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



1412-6057, GALACTIC PLANE SURVEY

FIELD CENTER:  $14^{\text{h}}12^{\text{m}}51.3^{\text{s}}$   $-60^{\circ}57'57''$  (B1950)  
 $14^{\text{h}}16^{\text{m}}32.1^{\text{s}}$   $-61^{\circ}11'51''$  (J2000)  
 $l: 313.00$   $b: 0.00$

DATE: 1980/227 - 1980/227  
 LIVETIME: 3056.3s  
 ROLL ANGLE:  $64.8^{\circ}$

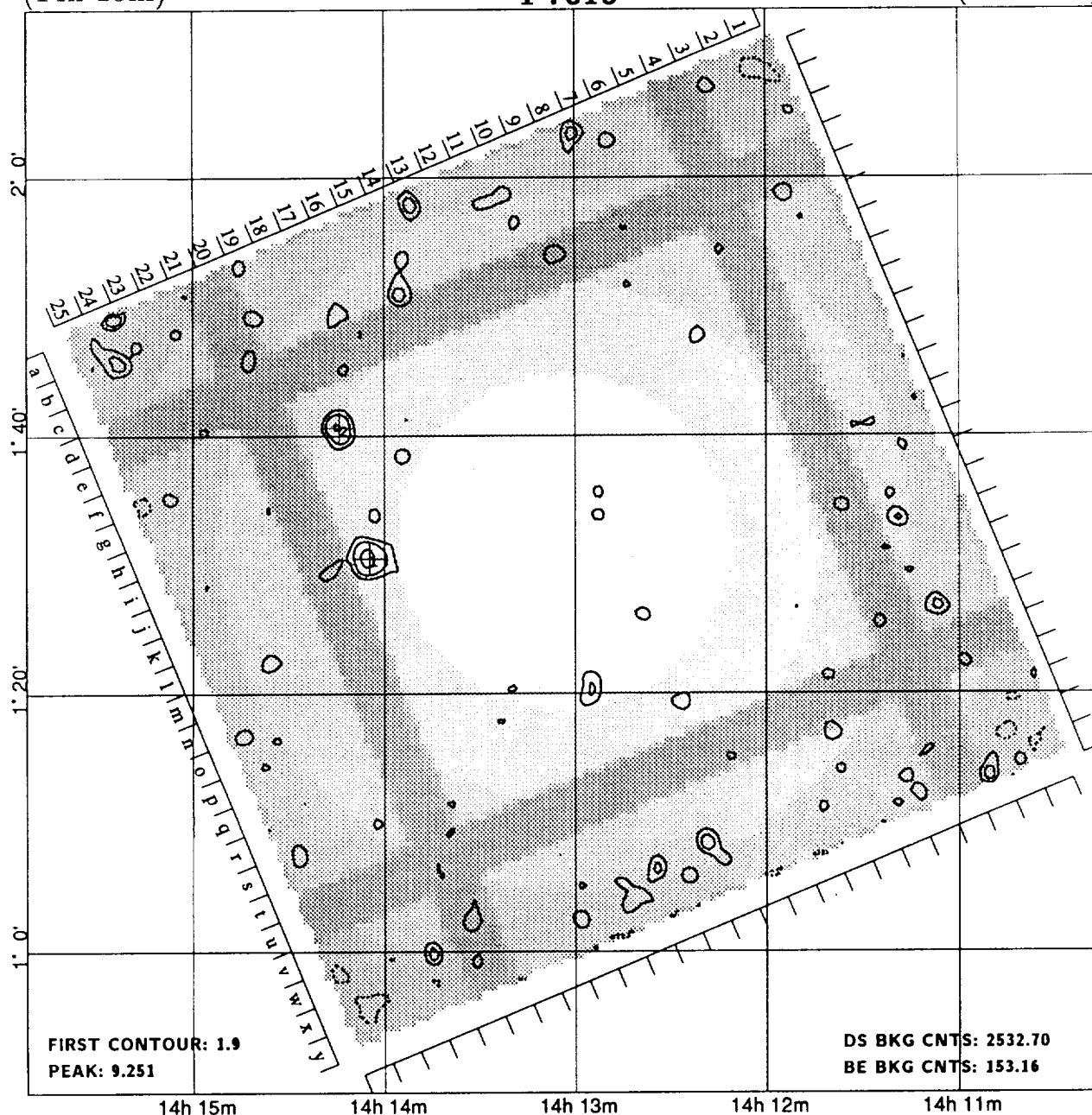
NH:  $1.3\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3210	1	14 12 07.3	-61 27 18	55	*0.0237	0.0065	18.6	7.4	3.6	0.9	702	29.7	AEH	

(14h 13m)

I 7818

(14h 13m)



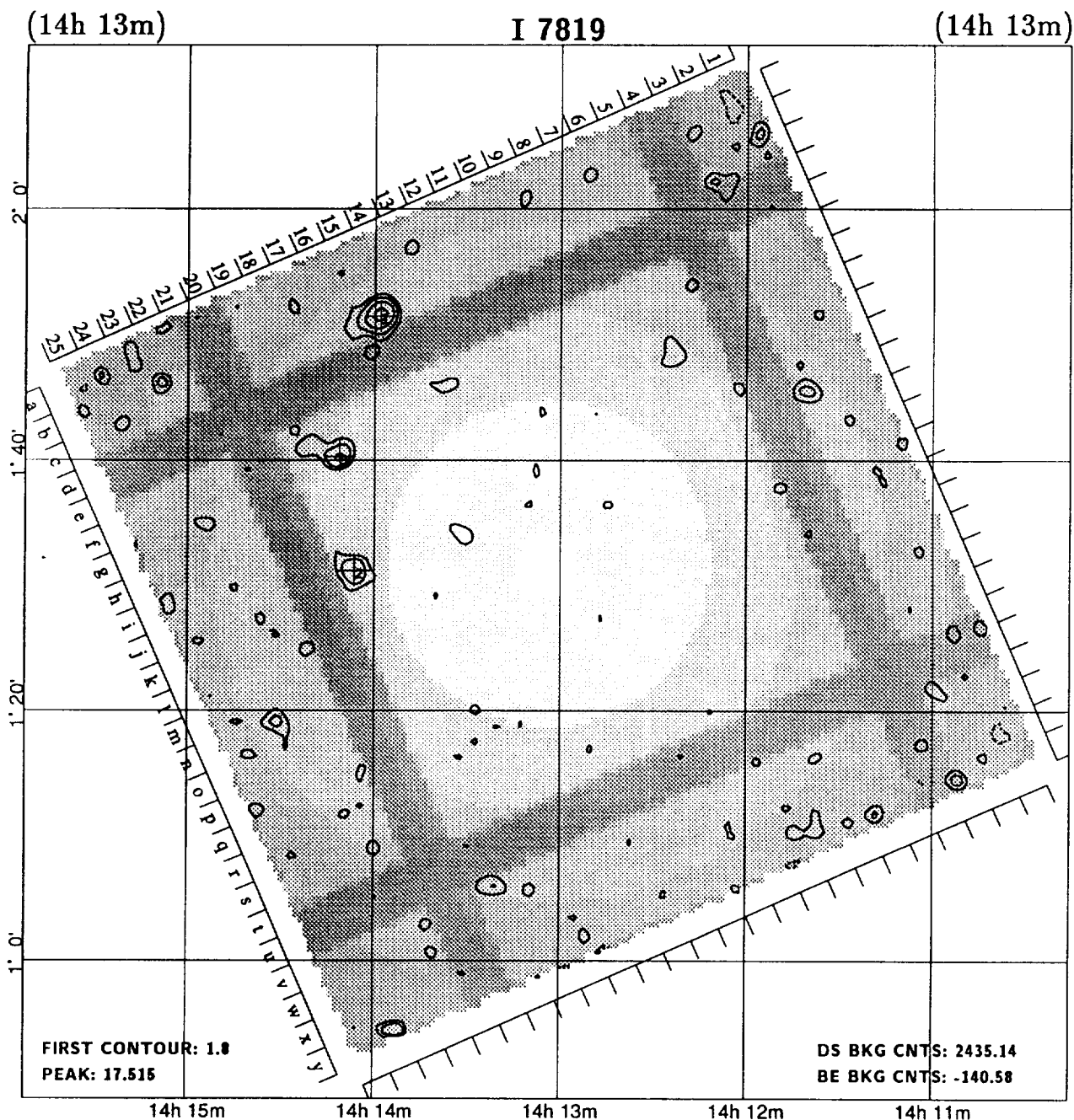
## PG 1413+01, X-RAY EMITTING EVOLVED ECLIPSING BINARIES

FIELD CENTER:  $14^{\text{h}}13^{\text{m}}04.0^{\text{s}}$   $01^{\circ}30'59''$  (B1950)  
 $14^{\text{h}}15^{\text{m}}36.8^{\text{s}}$   $01^{\circ}17'05''$  (J2000)  
 $l: 344.45$   $b: 57.21$

DATE: 1980/195 - 1980/195  
 LIVETIME: 2052.3s  
 ROLL ANGLE:  $67.5^{\circ}$

NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3222	1	14 14 04.7	01 30 30	51	0.0267	0.0051	32.0	5.0	5.3	1.1	500	15.3	AH	
3224	2	14 14 14.2	01 40 35	51	0.0216	0.0050	22.8	5.2	4.3	0.8	0	19.9	AH	



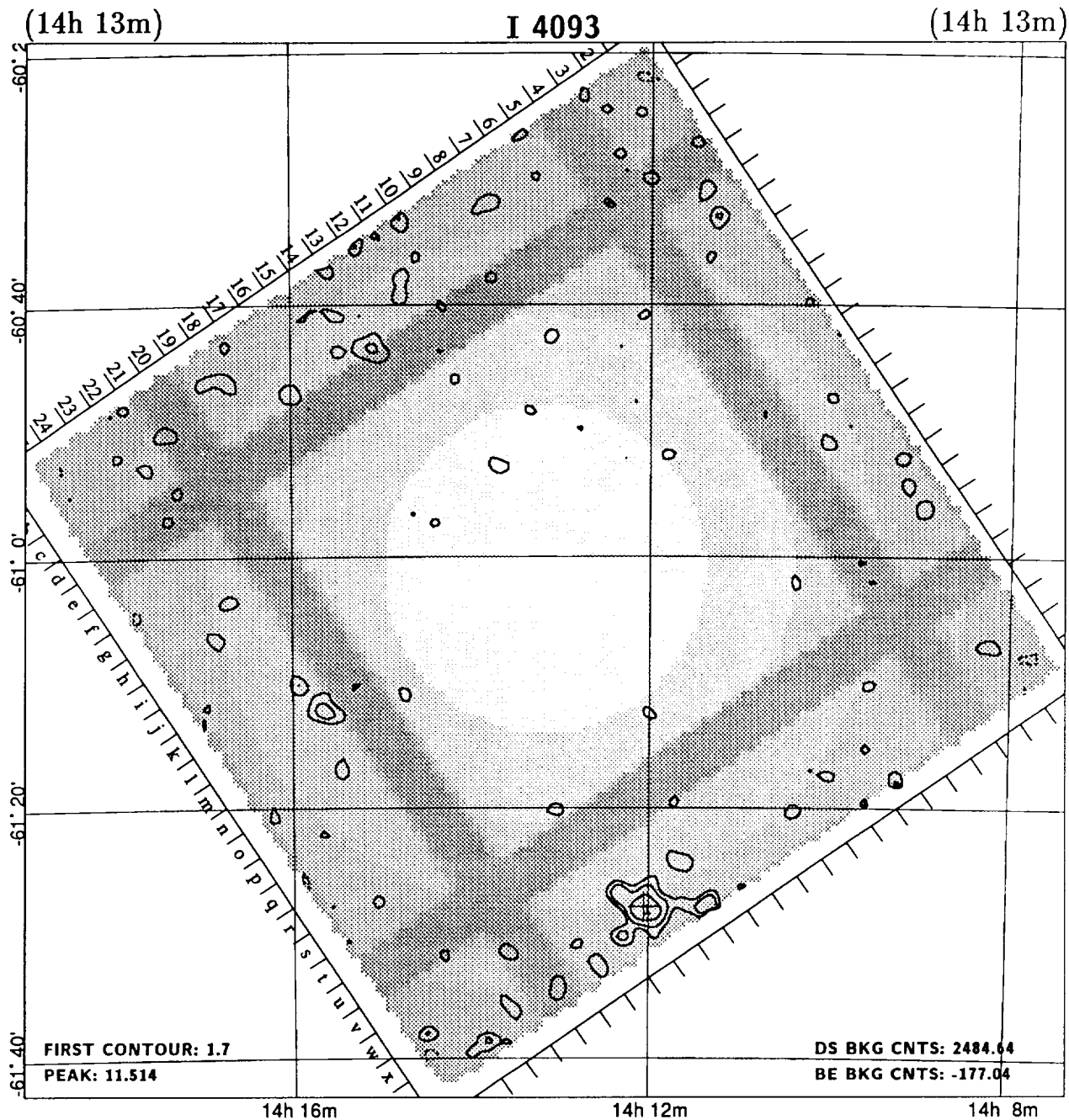
PG 1413+01,X-RAY EMITTING EVOLVED ECLIPSING BINARIES

FIELD CENTER:  $14^{\text{h}}13^{\text{m}}04.0^{\text{s}}$   $01^{\circ}30'59''$  (B1950)  
 $14^{\text{h}}15^{\text{m}}36.8^{\text{s}}$   $01^{\circ}17'05''$  (J2000)  
 $l: 344.45$   $b: 57.21$

DATE: 1980/190 - 1980/190  
 LIVETIME: 1973.3s  
 ROLL ANGLE:  $66.3^{\circ}$

NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3221	1	14 13 58.2	01 51 23	50	*0.0425	0.0073	37.5	3.5	5.9	1.0	501	24.4	H	
3222	2	14 14 06.4	01 31 09	52	*0.0181	0.0044	20.8	4.2	4.2	0.8	501	15.9	AH	
3224	3	14 14 11.3	01 40 17	52	0.0173	0.0045	18.0	4.0	3.8	1.0	0	19.3	AH	

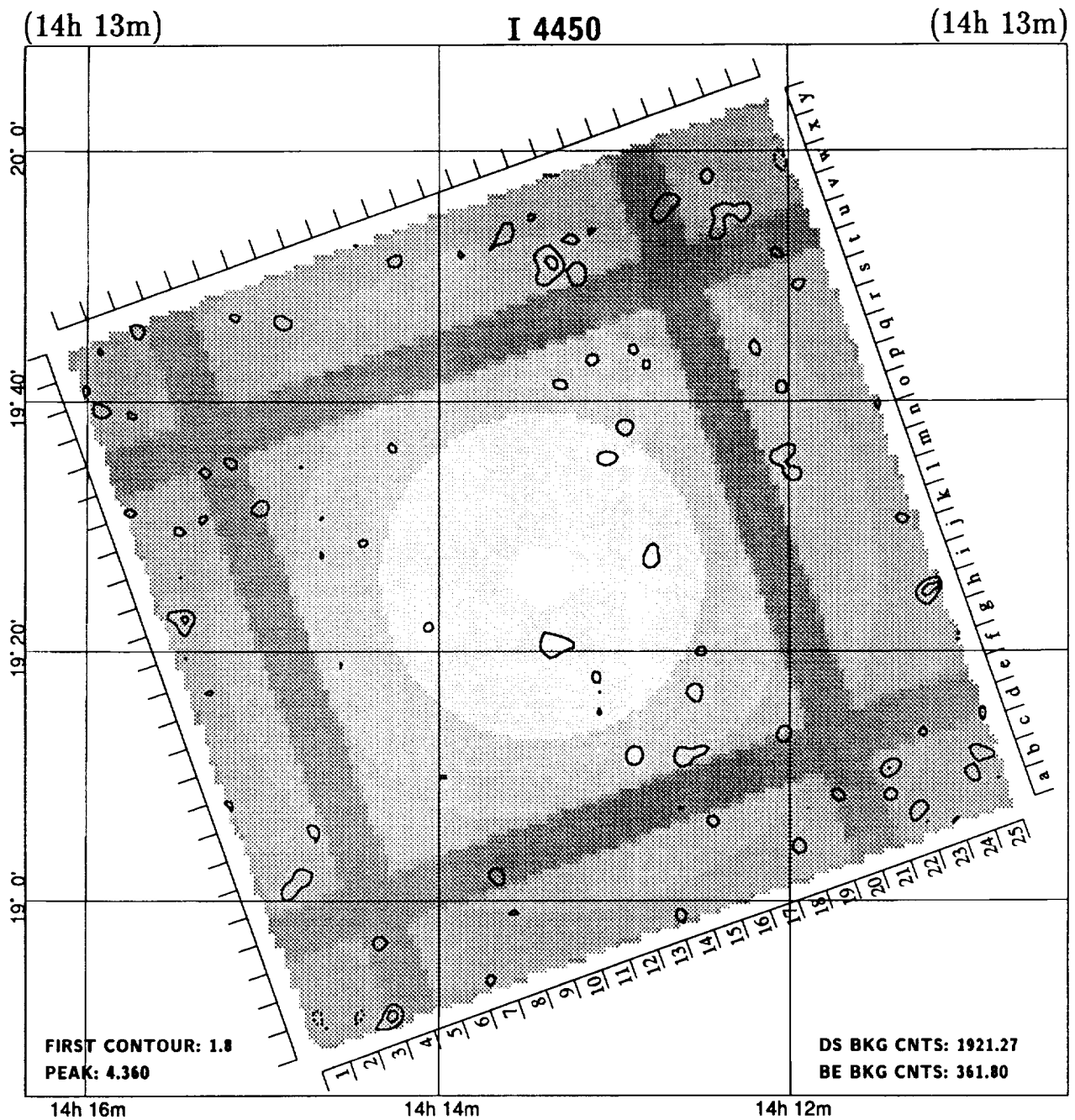


FIELD CENTER:  $14^h 13^m 11.0^s$   $-61^\circ 01' 11''$  (B1950)  
 $14^h 16^m 52.1^s$   $-61^\circ 15' 05''$  (J2000)  
 $l: 313.02$   $b: -0.06$

DATE: 1979/240 - 1979/240  
 LIVETIME: 2013.4s  
 ROLL ANGLE:  $56.0^\circ$

NH:  $1.2E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3210	1	14 12 03.3	-61 27 53	51	0.0376	0.0075	28.8	4.2	5.0	1.7	0	27.7	AH	



**ALPHA BOO, CORRELLATION OF X RAYS WITH STELLAR WIND AND ROTATION**

**FIELD CENTER:**  $14^h 13^m 23.0^s$   $19^\circ 26' 30''$  (B1950)  
 $14^h 15^m 43.7^s$   $19^\circ 12' 36''$  (J2000)  
 $l: 15.14$   $b: 69.11$

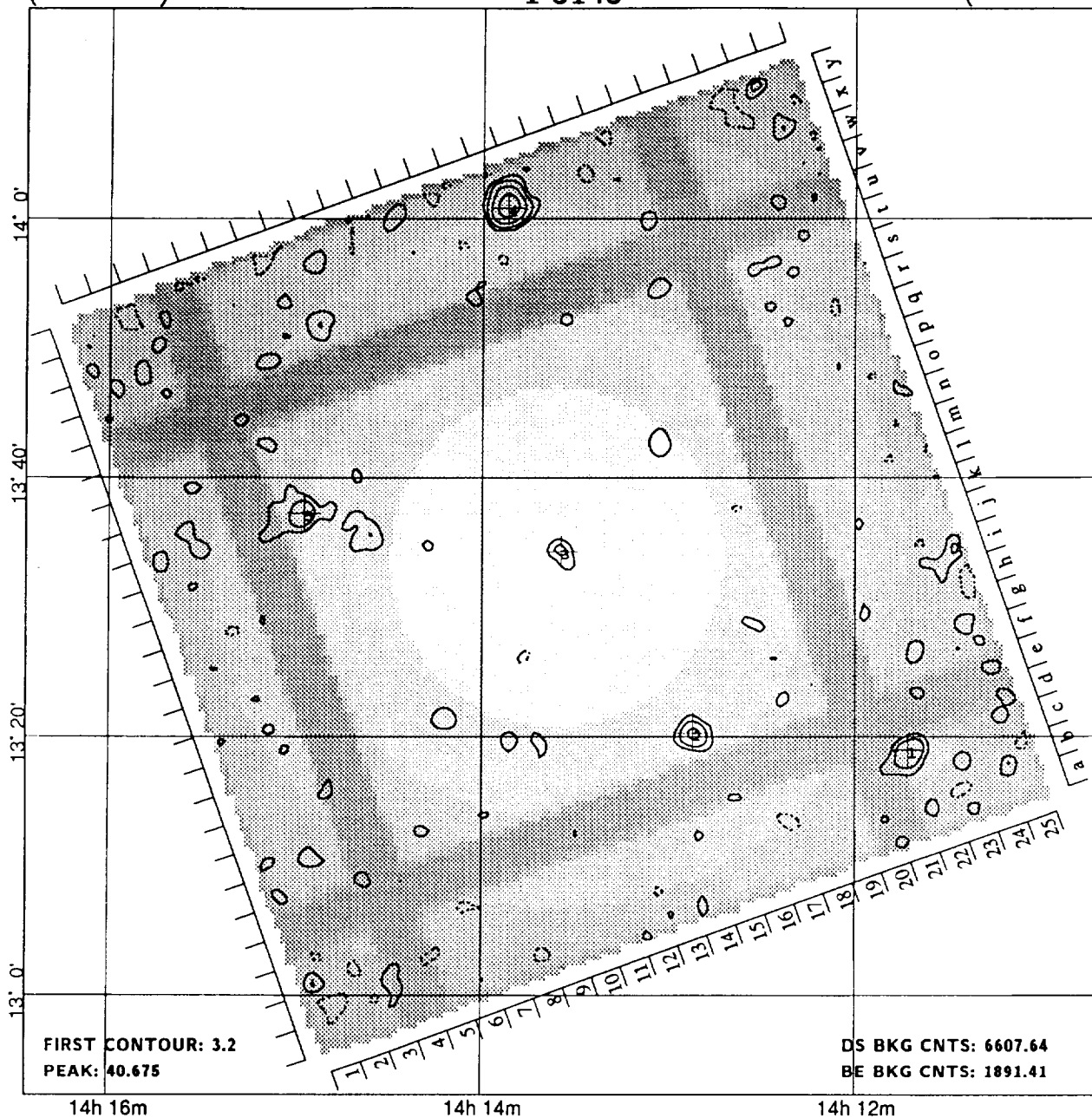
**DATE:** 1980/ 20 - 1980/ 20  
**LIVETIME:** 1556.9s  
**ROLL ANGLE:** -109.5°

**NH:** 2.3E+20  
**REF/ID:**  
**FIELD FLAGS:**

(14h 13m)

I 5143

(14h 13m)



QSO 1413+135

FIELD CENTER:  $14^h 13^m 34.0^s$   $13^\circ 34' 17''$  (B1950)  
 $14^h 15^m 58.9^s$   $13^\circ 20' 24''$  (J2000)  
 $l: 2.21$   $b: 65.91$

DATE: 1980/ 20 - 1980/ 21  
 LIVETIME: 5354.4s  
 ROLL ANGLE:  $-109.7^\circ$

NH:  $1.5E+20$   
 REF/ID: !  
 FIELD FLAGS: C

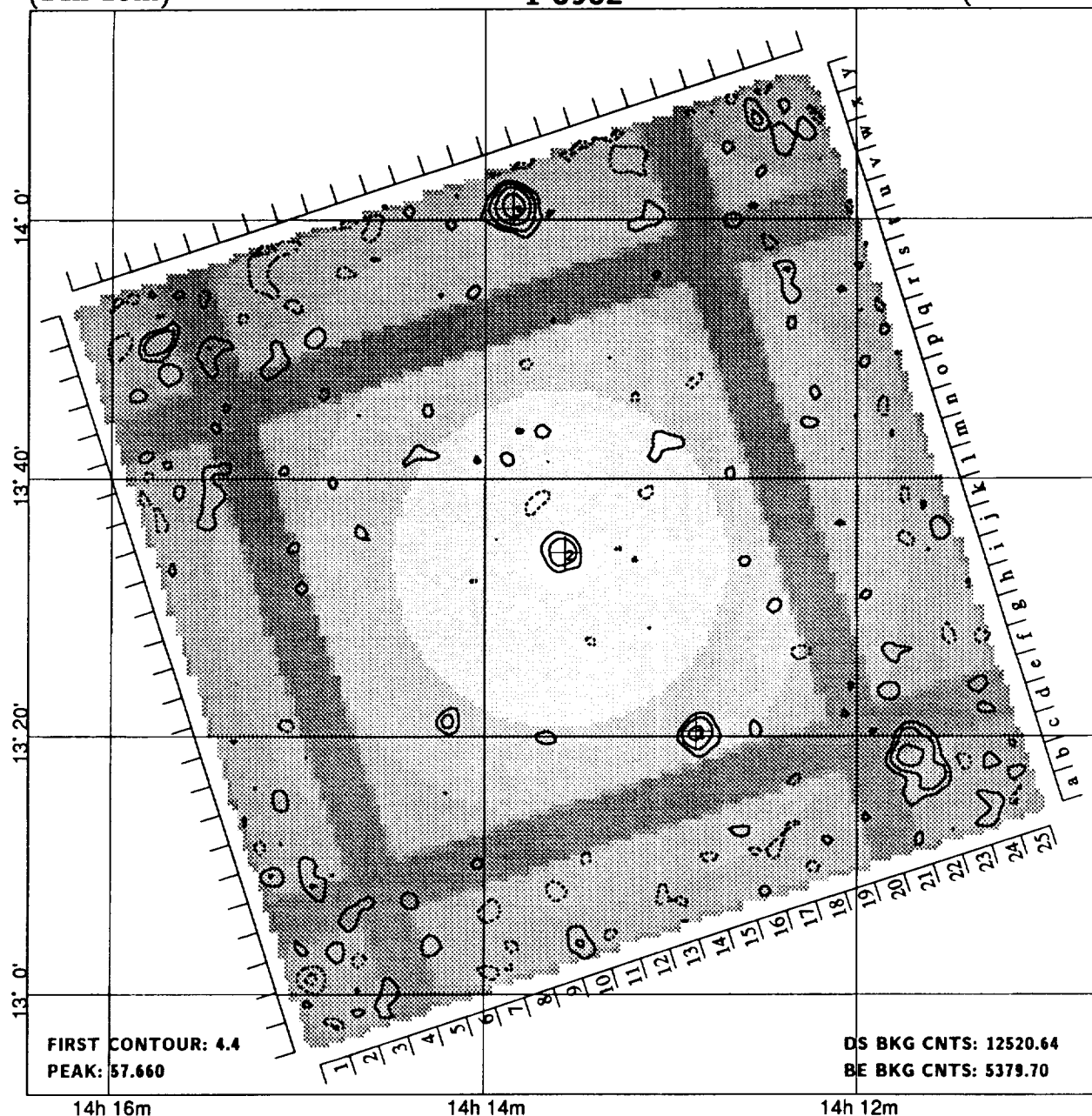
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3209	1	14 11 43.1	13 18 58	57	*0.0134	0.0032	23.8	8.2	4.2	0.9	1004	31.1	H	*
3215	2	14 12 51.9	13 20 16	51	0.0127	0.0025	37.6	15.4	5.2	0.8	0	17.0	AH	*
3219	3	14 13 34.4	13 34 22	36	0.0063	0.0017	25.1	21.9	3.7	0.7	0	0.6	A	Q
3220	4	14 13 51.9	14 00 49	48	0.0414	0.0048	87.3	15.7	8.6	1.1	0	26.9	AH	*
3228	5	14 14 57.4	13 37 15	51	0.0114	0.0024	30.9	13.1	4.7	1.2	200	20.6	H	*



(14h 13m)

I 8982

(14h 13m)



RED QSO-II:1413+135

FIELD CENTER:  $14^h 13^m 34.0^s$   $13^\circ 34' 17''$  (B1950)  
 $14^h 15^m 58.9^s$   $13^\circ 20' 24''$  (J2000)  
 $l: 2.21$   $b: 65.91$

DATE: 1981/ 24 - 1981/ 25  
 LIVETIME: 10145.9s  
 ROLL ANGLE:  $-107.9^\circ$

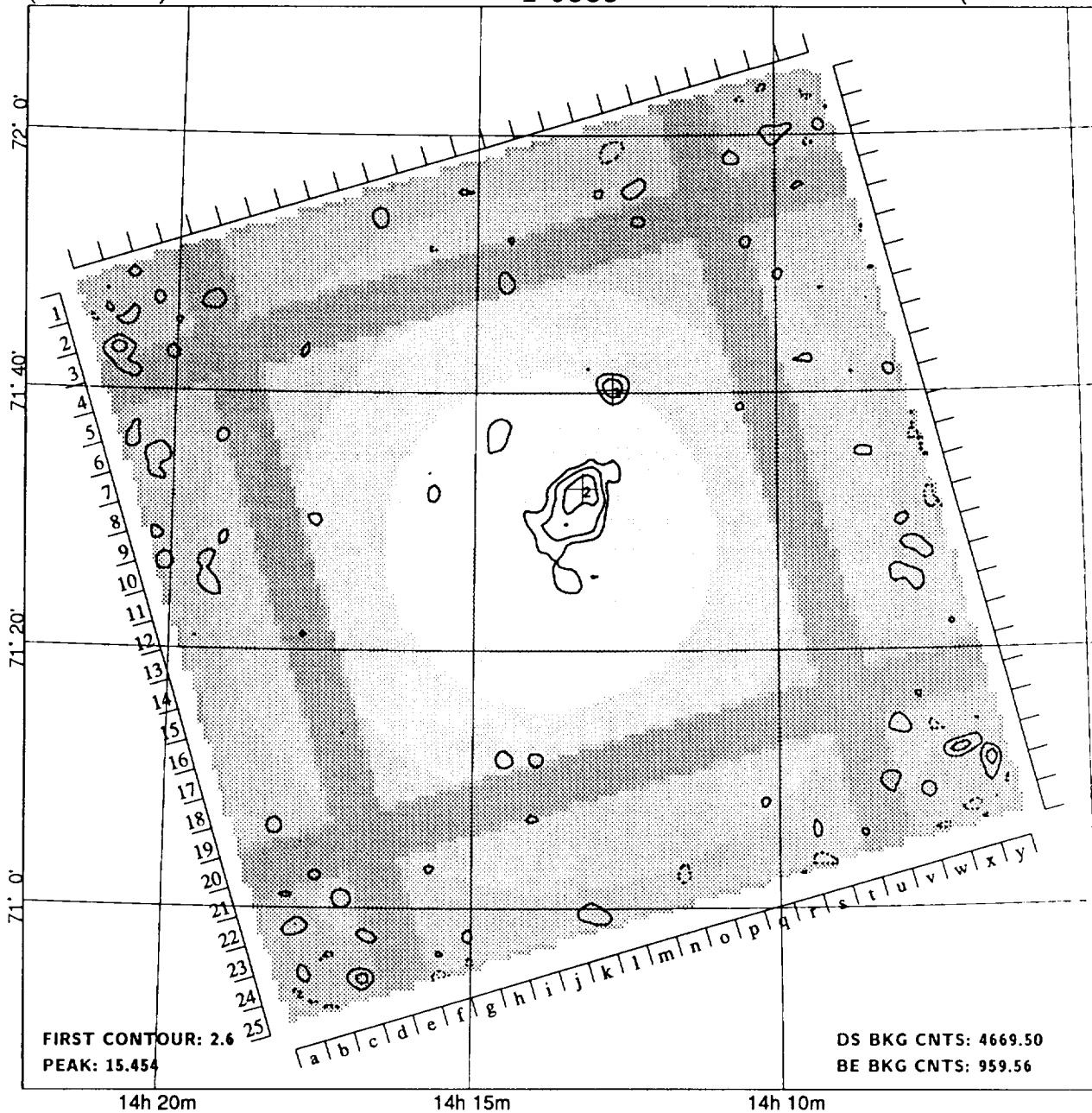
NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3215	1L	14 12 51.7	13 20 24	50	0.0100	0.0021	56.9	39.1	4.7	0.9	0	17.3	A	*
3219	2L	14 13 34.1	13 34 17	35	0.0097	0.0018	73.0	48.0	5.4	0.9	0	0.1	A	Q
3220	3L	14 13 50.9	14 00 51	48	0.0272	0.0036	107.9	43.1	7.3	1.1	0	26.9	A	*

(14h 13m)

I 6885

(14h 13m)



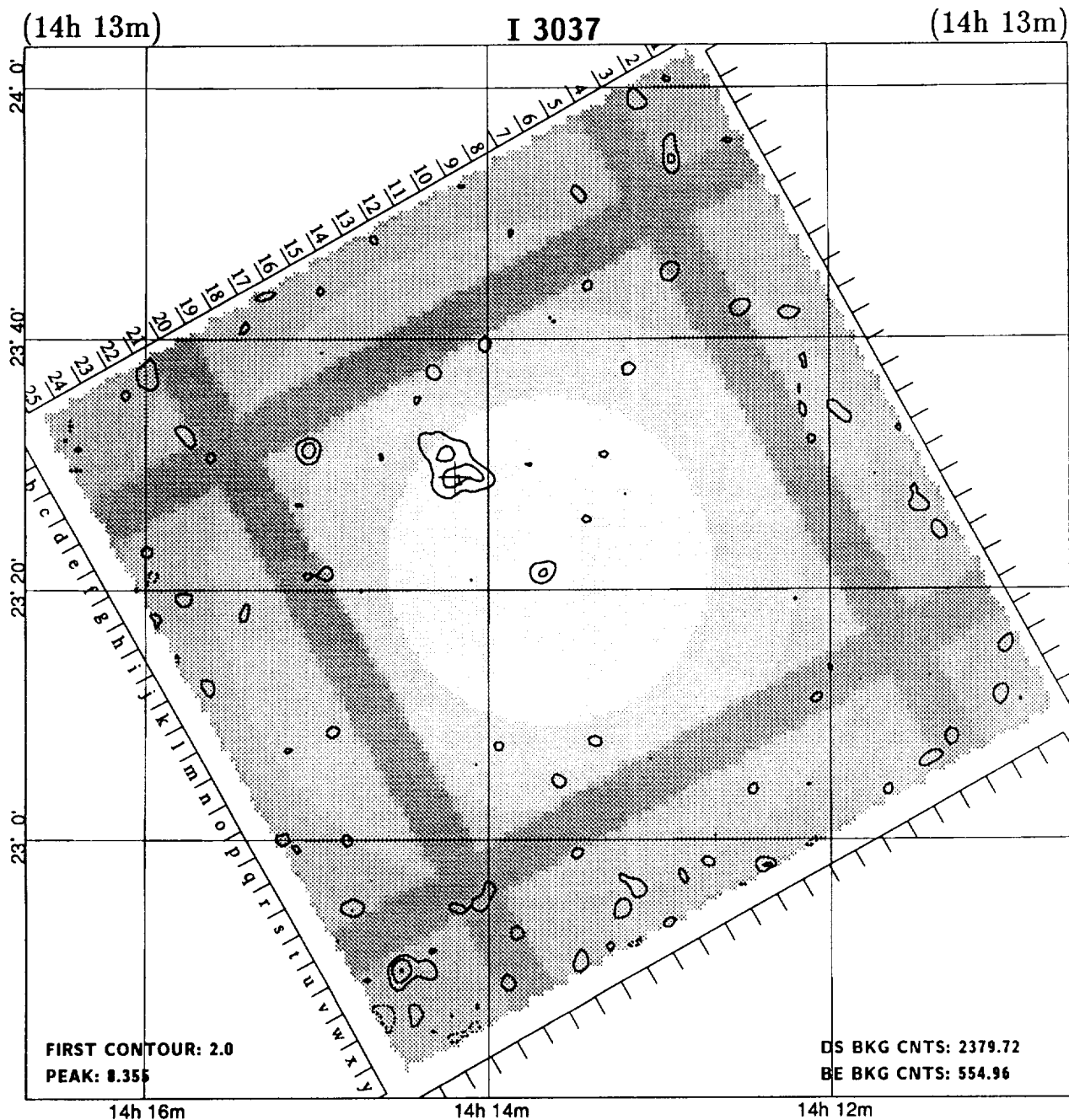
A1895, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $14^h 13^m 36.0^s$   $71^\circ 27' 59''$  (B1950)  
 $14^h 14^m 20.5^s$   $71^\circ 14' 03''$  (J2000)  
 $l: 113.76$   $b: 44.39$

DATE: 1980/106 - 1980/106  
 LIVETIME: 3783.8s  
 ROLL ANGLE:  $-16.3^\circ$

NH:  $2.1E+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3214	1	14 12 43.3	71 40 15	43	0.0107	0.0026	25.4	11.6	4.2	0.7	0	13.1	H	
3217	2	14 13 13.4	71 32 36	35	0.0268	0.0035	72.6	15.4	7.7	2.6	0	5.0	H	CLG



**4C23.37: HIGH REDSHIFT CLUSTERS OF GALAXIES**

FIELD CENTER:  $14^{\text{h}}13^{\text{m}}39.0^{\text{s}}$   $23^{\circ}21'26''$  (B1950)  
 $14^{\text{h}}15^{\text{m}}56.8^{\text{s}}$   $23^{\circ}07'33''$  (J2000)  
 $l: 25.78$   $b: 70.48$

DATE: 1979/179 - 1979/180  
 LIVETIME: 1928.4s  
 ROLL ANGLE:  $60.8^{\circ}$

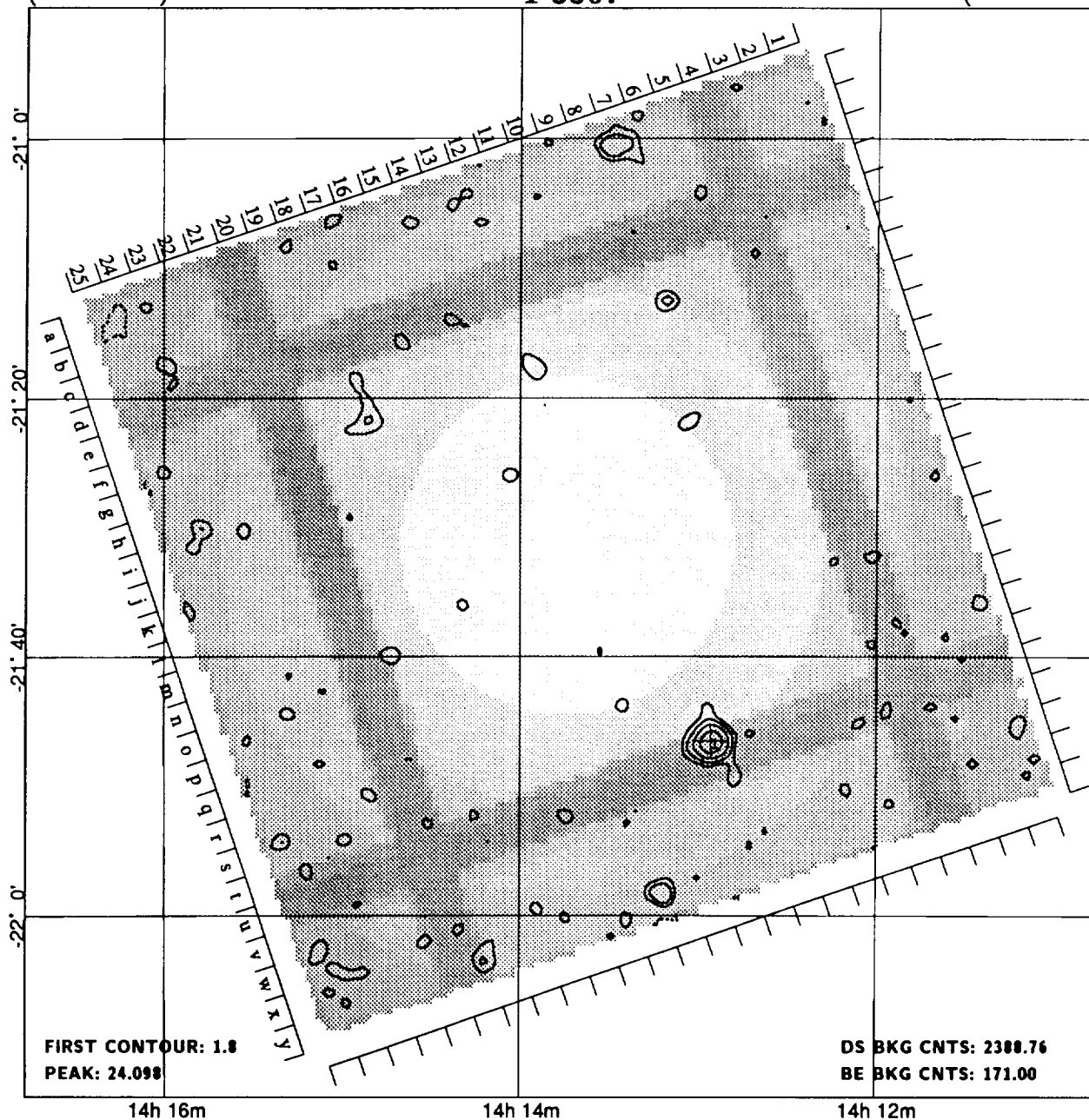
NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3223	1	14 14 11.8	23 29 03	45	0.0166	0.0041	21.2	6.8	4.0	1.9	0	10.9	H	

(14h 13m)

I 3307

(14h 13m)



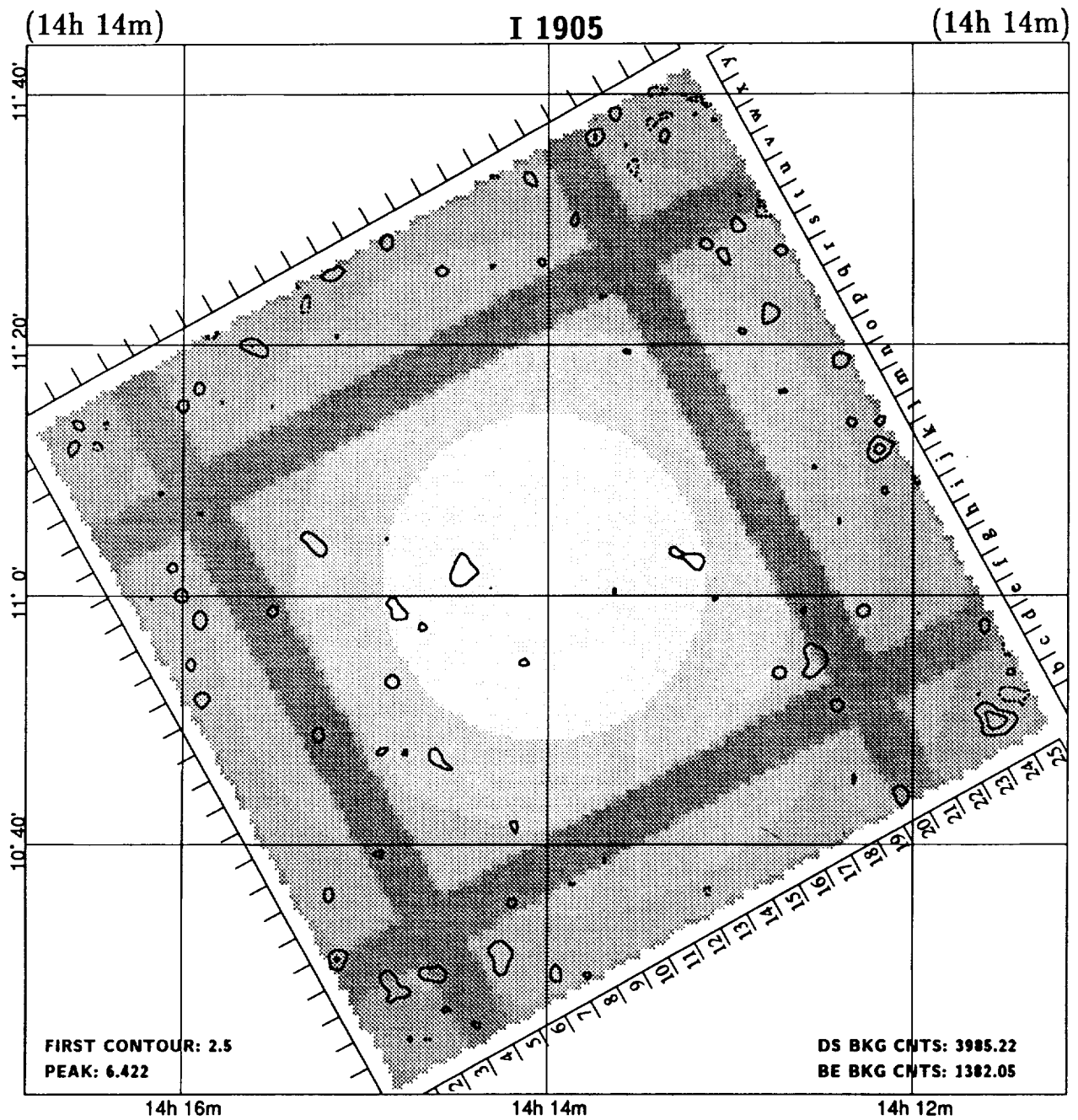
SYMBIOTIC STARS: BD -21 3873

FIELD CENTER:  $14^{\text{h}}13^{\text{m}}45.8^{\text{s}}$   $-21^{\circ}31'58''$  (B1950)  
 $14^{\text{h}}16^{\text{m}}34.3^{\text{s}}$   $-21^{\circ}45'51''$  (J2000)  
 $l: 327.88$   $b: 36.95$

DATE: 1979/206 - 1979/206  
 LIVETIME: 1935.7s  
 ROLL ANGLE:  $71.3^{\circ}$

NH:  $7.1\text{E}+20$   
 REF/ID: S  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3216	1	14 12 55.5	-21 46 25	48	*0.0651	0.0082	66.9	4.1	7.9	1.1	1007	18.4	H



X-RAY STUDY OF RADIO GALAXIES: 3C296

FIELD CENTER:  $14^{\text{h}}14^{\text{m}}00.0^{\text{s}}$   $11^{\circ}01'59''$  (B1950)  
 $14^{\text{h}}16^{\text{m}}26.6^{\text{s}}$   $10^{\circ}48'07''$  (J2000)  
 $l$ : 357.79  $b$ : 64.19

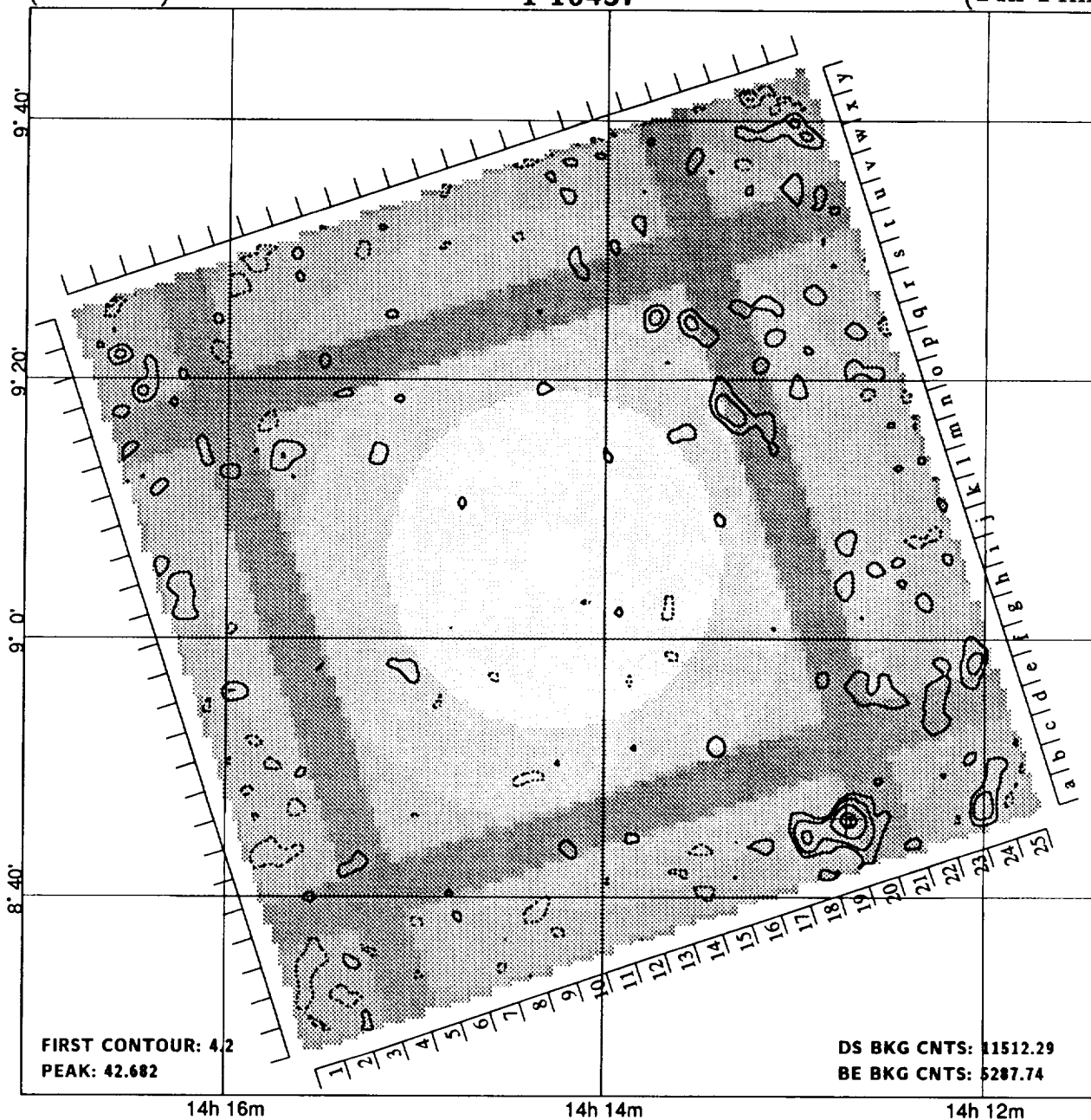
DATE: 1979/ 24 - 1979/ 24  
 LIVETIME: 3229.4s  
 ROLL ANGLE:  $-119.1^{\circ}$

NH:  $1.9\text{E}+20$   
 REF/ID: I  
 FIELD FLAGS: L

(14h 14m)

I 10437

(14h 14m)



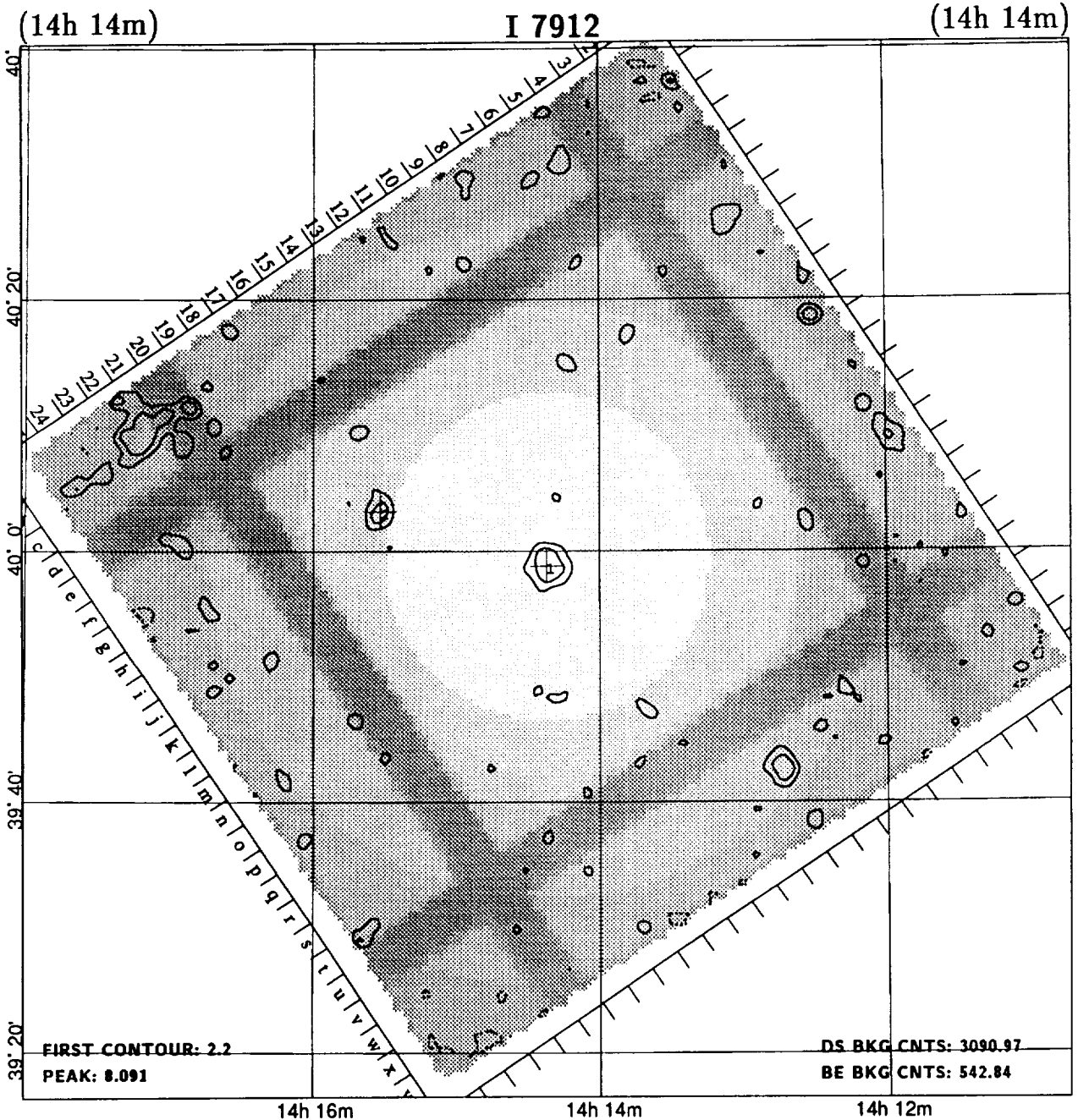
## 1414+09, OPTICALLY SELECTED QSOS

FIELD CENTER:  $14^{\text{h}}14^{\text{m}}14.0^{\text{s}}$   $09^{\circ}06'38''$  (B1950)  
 $14^{\text{h}}16^{\text{m}}41.8^{\text{s}}$   $08^{\circ}52'46''$  (J2000)  
 $l: 354.76$   $b: 62.82$

DATE: 1981/ 25 - 1981/ 25  
 LIVETIME: 9328.9s  
 ROLL ANGLE:  $-108.2^{\circ}$

NH:  $2.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3213	1L	14 12 43.1	08 46 09	50	*0.0224	0.0045	72.1	34.6	4.8	1.7	803	30.4	



# HD 125111, CORONAL ACTIVITY IN F, G, & K STARS

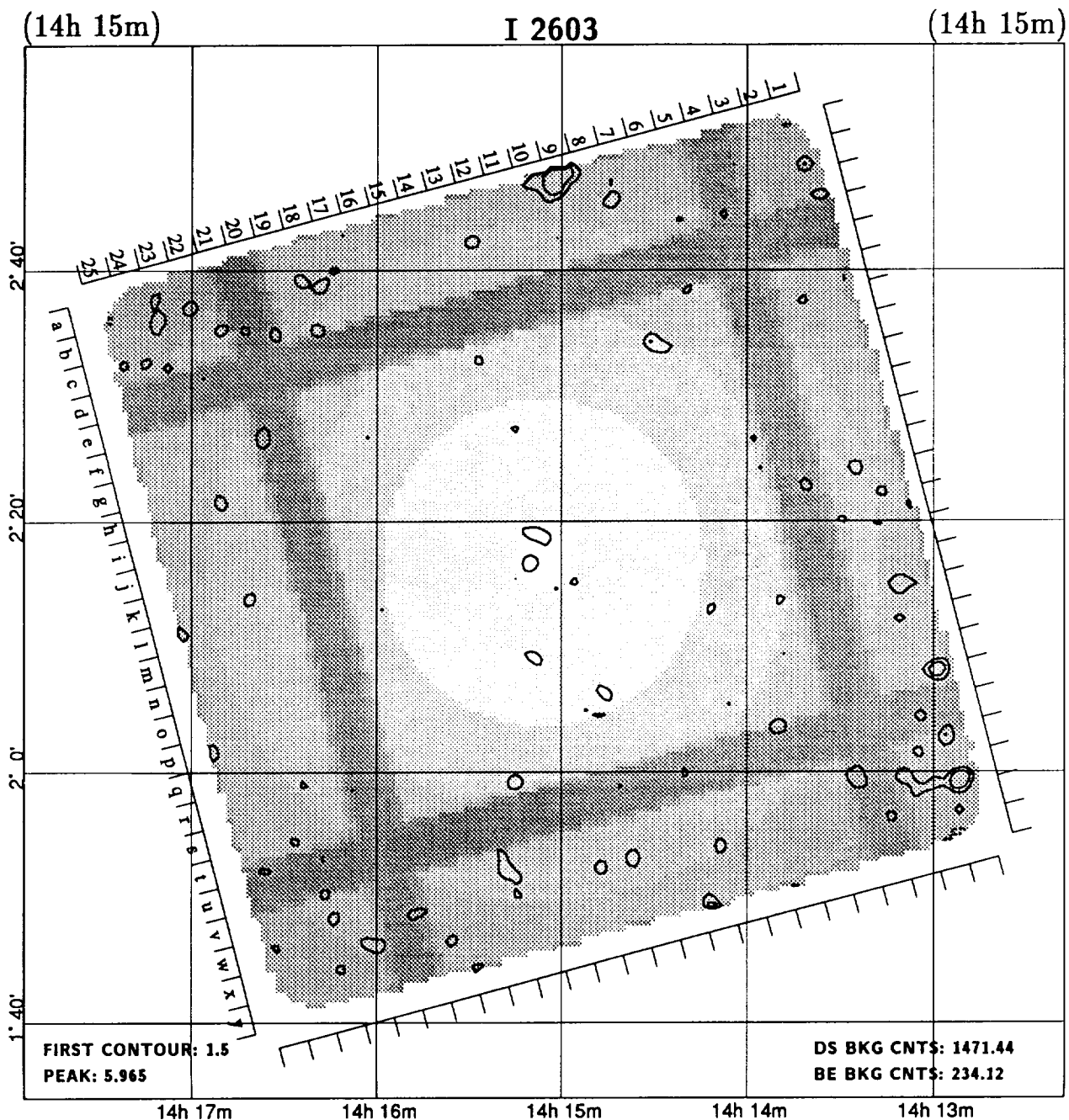
FIELD CENTER:  $14^h 14^m 22.2^s$   $39^\circ 58' 31''$  (B1950)  
 $14^h 16^m 24.9^s$   $39^\circ 44' 39''$  (J2000)  
 $l: 73.94$   $b: 68.33$

DATE: 1980/181 - 1980/181  
 LIVETIME: 2504.7s  
 ROLL ANGLE:  $56.2^\circ$

NH:  $8.7E+19$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3226	1	14 14 22.4	39 58 47	36	0.0176	0.0035	32.8	9.2	5.1	1.2	0	0.2	H	
3232	2	14 15 32.0	40 03 10	45	0.0128	0.0034	19.5	7.5	3.8	0.7	0	13.9	H	





**MKW 6: CD GALAXIES IN POOR CLUSTERS**

FIELD CENTER:  $14^{\text{h}}15^{\text{m}}06.0^{\text{s}}$   $02^{\circ}15'59''$  (B1950)  
 $14^{\text{h}}17^{\text{m}}38.3^{\text{s}}$   $02^{\circ}02'10''$  (J2000)  
 $l: 346.04$   $b: 57.51$

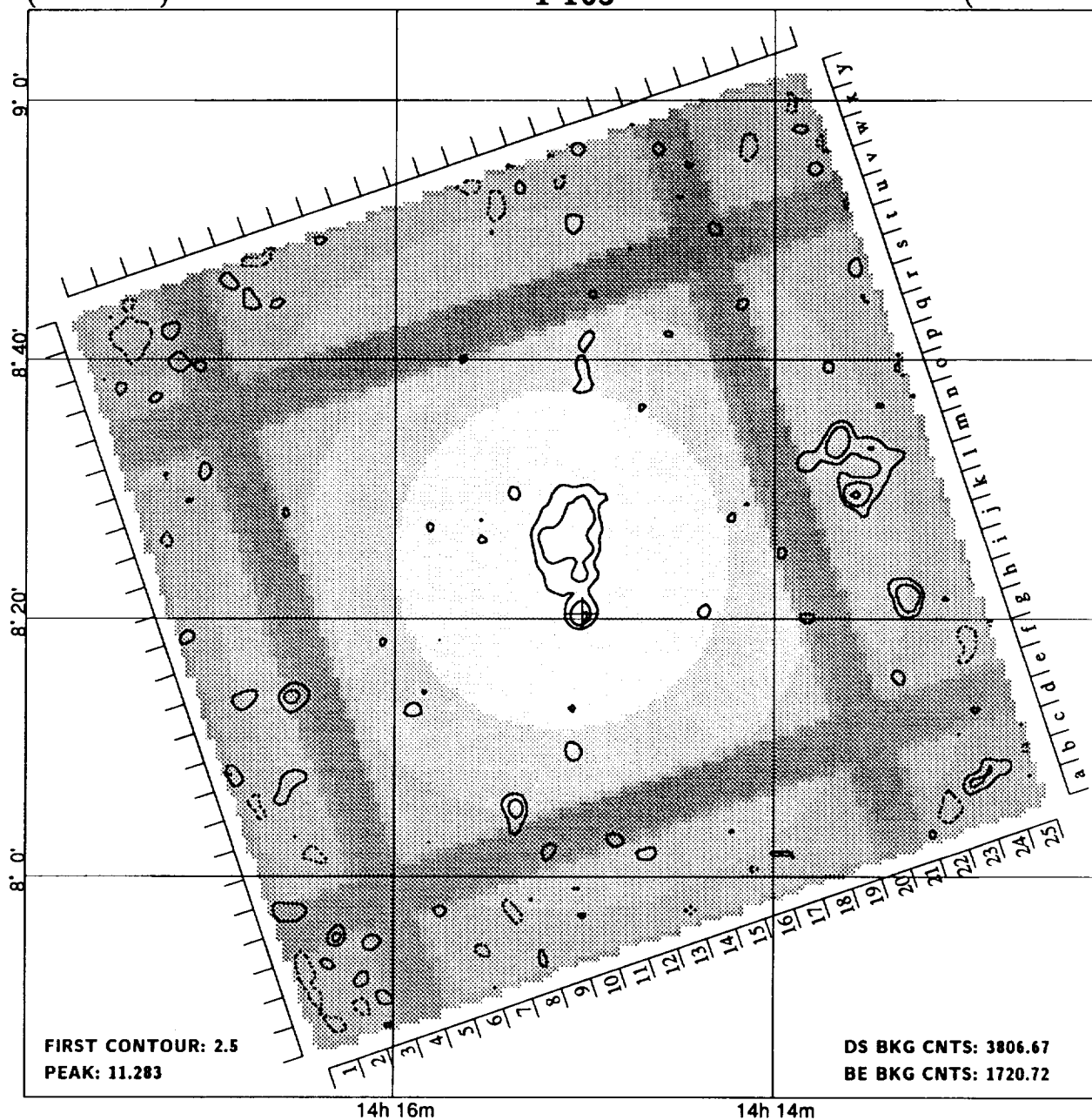
DATE: 1979/213 - 1979/213  
 LIVETIME: 1192.3s  
 ROLL ANGLE:  $75.3^{\circ}$

NH:  $2.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 15m)

I 165

(14h 15m)



## A1890 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $14^h 15^m 06.0^s$   $08^\circ 24' 57''$  (B1950)  
 $14^h 17^m 34.3^s$   $08^\circ 11' 07''$  (J2000)  
 $l: 354.03$   $b: 62.17$

DATE: 1979/ 24 - 1979/ 24  
 LIVETIME: 3084.7s  
 ROLL ANGLE:  $-108.9^\circ$

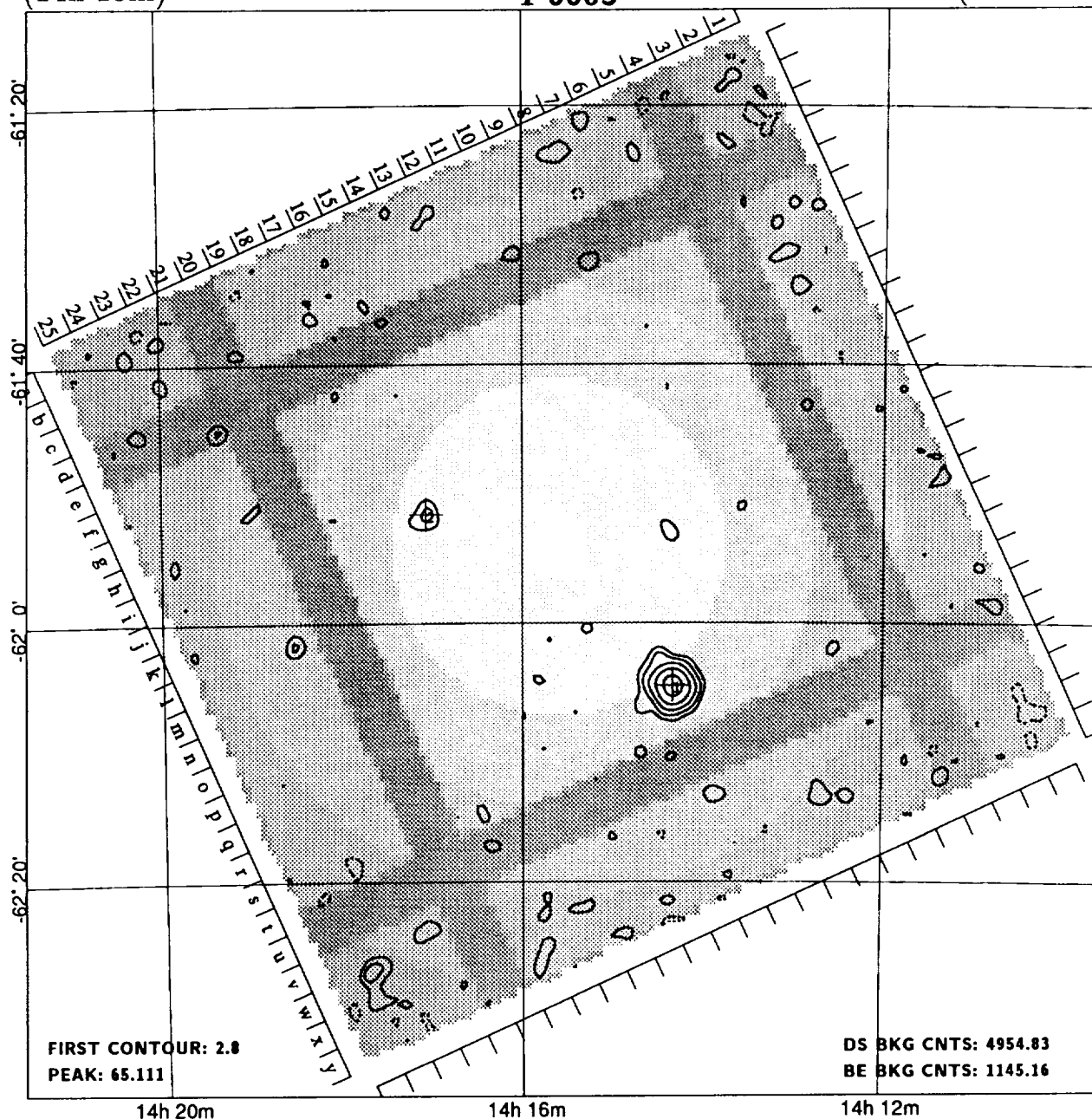
NH:  $2.1E+20$   
 REF/ID: CLG  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3230	1L	14 15 00.7	08 20 23	42	0.0167	0.0037	37.0	13.0	4.3	6.3	0	5.1	

(14h 15m)

I 6603

(14h 15m)



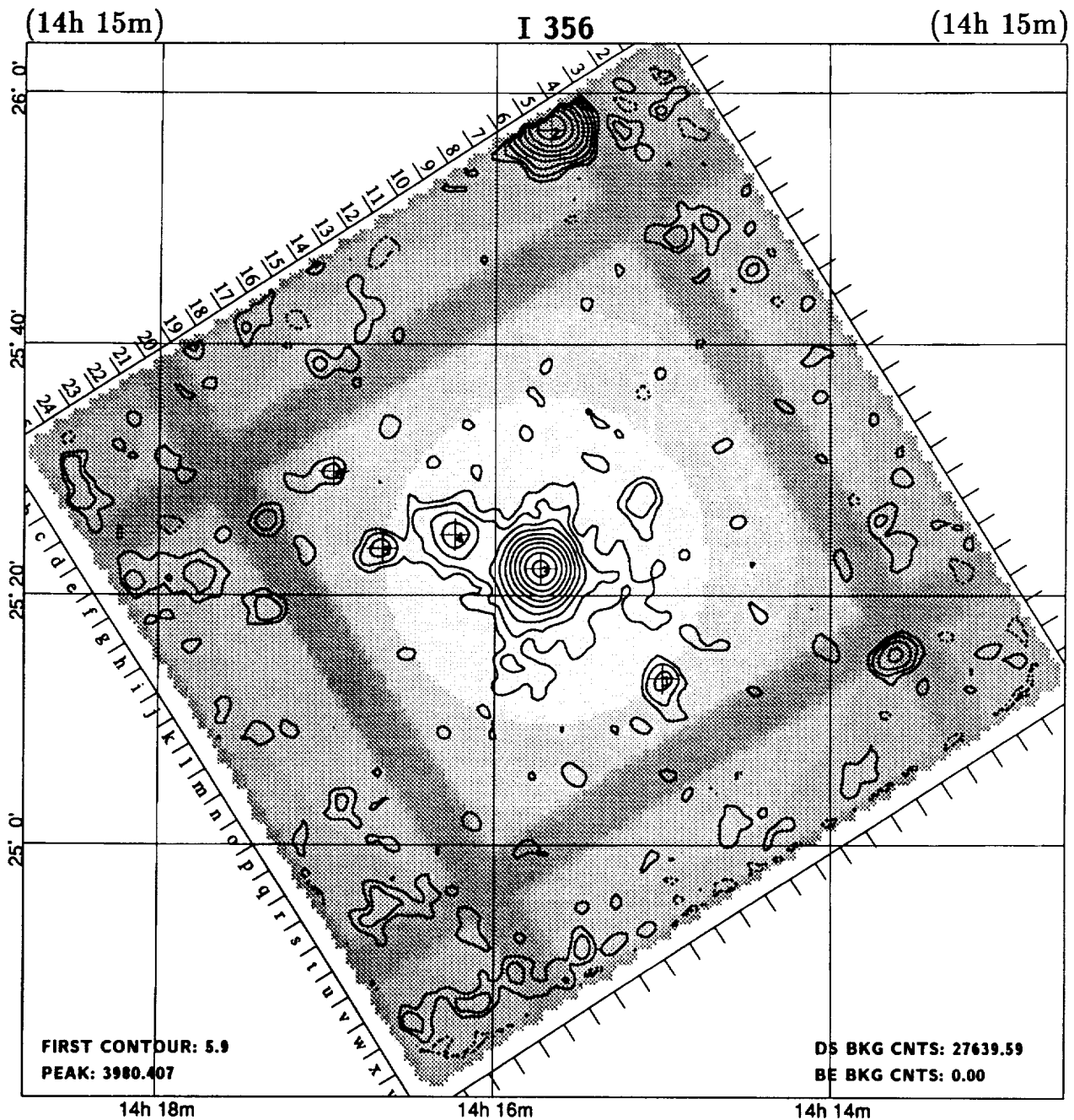
## 1415-6154, GALACTIC PLANE SURVEY

**FIELD CENTER:**  $14^h 15^m 33.3^s$   $-61^\circ 54' 42''$  (B1950)  
 $14^h 19^m 18.1^s$   $-62^\circ 08' 30''$  (J2000)  
 $l: 313.00$   $b: -1.00$

**DATE:** 1980/227 - 1980/228  
**LIVETIME:** 4015.1s  
**ROLL ANGLE:**  $65.7^\circ$

**NH:**  $1.2E+21$   
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3225	1	14 14 19.6	-62 04 52	38	0.0869	0.0062	212.3	13.7	14.1	1.2	0	13.3	AH	
3246	2	14 17 04.2	-61 51 36	46	0.0088	0.0023	23.2	14.8	3.8	0.7	0	11.0		



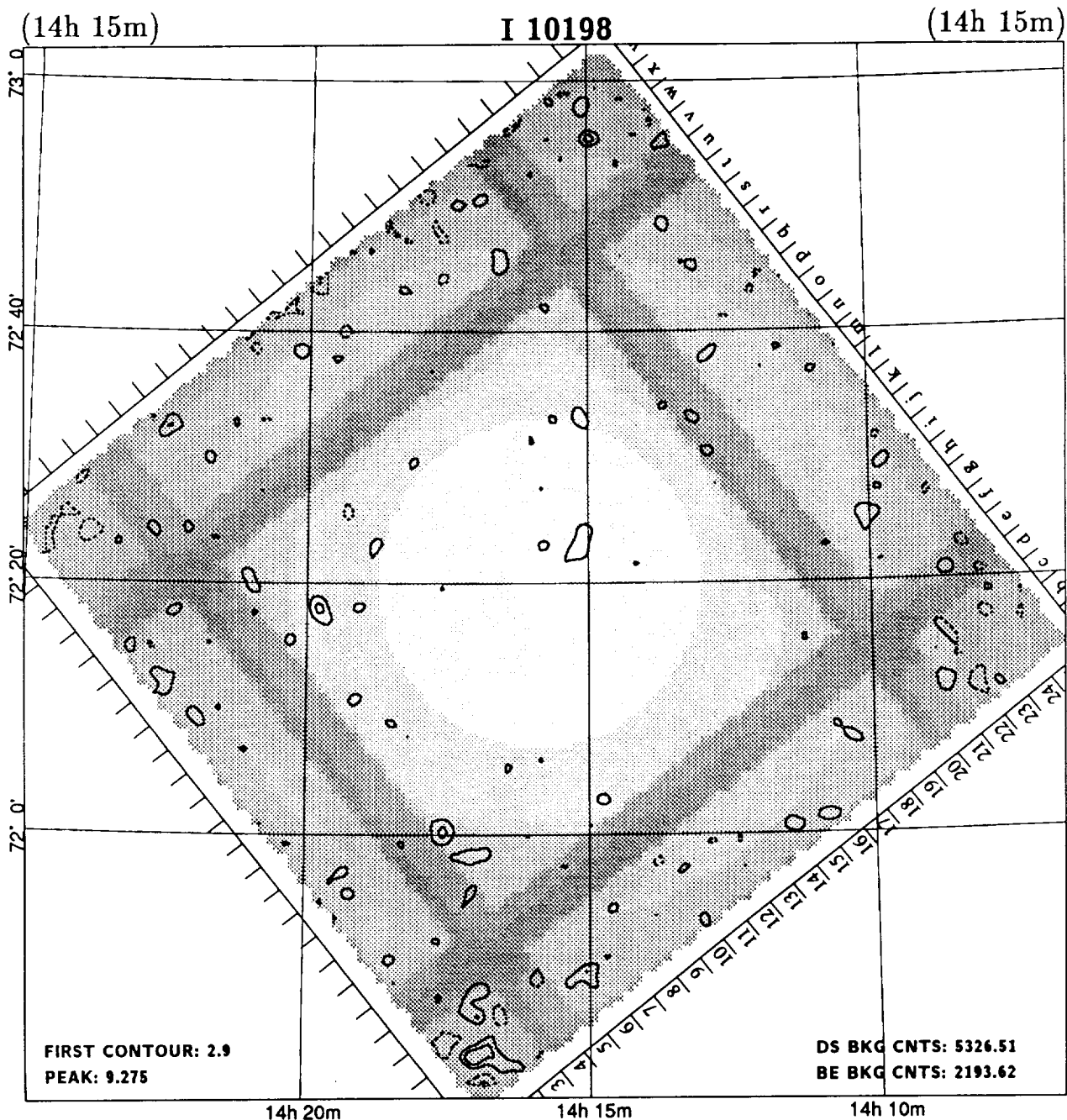
NGC 5548 SEYFERT VARIABILITY STUDY

FIELD CENTER:  $14^{\text{h}}15^{\text{m}}42.0^{\text{s}}$   $25^{\circ}21'59''$  (B1950)  
 $14^{\text{h}}17^{\text{m}}58.0^{\text{s}}$   $25^{\circ}08'11''$  (J2000)  
 $l: 31.96$   $b: 70.50$

DATE: 1979/180 - 1979/181  
 LIVETIME: 22397.2s  
 ROLL ANGLE:  $57.5^{\circ}$

NH:  $1.7\text{E}+20$   
 REF/ID: I  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3229	1L	14 14 59.9	25 13 17	39	0.0068	0.0011	94.6	73.4	5.9	1.2	0	13.0		AGN
3235	2L	14 15 40.4	25 57 02	47	*0.2071	0.0078	2172.5	383.5	26.6	1.2	1104	35.1	I	BL
3236	3L	14 15 43.7	25 22 07	31	0.9058	0.0087	15121.0	1474.0	104.0	1.3	0	0.4		CLG
3237	4L	14 16 14.4	25 24 47	38	0.0133	0.0015	204.7	165.3	8.6	63.7	0	7.8		AGN
3241	5L	14 16 40.4	25 23 44	39	0.0071	0.0011	97.8	69.2	6.1	167.1	0	13.3		
3243	6L	14 16 58.0	25 29 51	55	0.0036	0.0010	43.4	49.6	3.5	1.3	0	18.6		



**UMI MEDIUM SENSITIVITY SURVEY, TARGET 5**

FIELD CENTER:  $14^{\text{h}}15^{\text{m}}48.0^{\text{s}}$   $72^{\circ}20'59''$  (B1950)  
 $14^{\text{h}}16^{\text{m}}25.0^{\text{s}}$   $72^{\circ}07'09''$  (J2000)  
 $\ell$ : 114.11  $b$ : 43.52

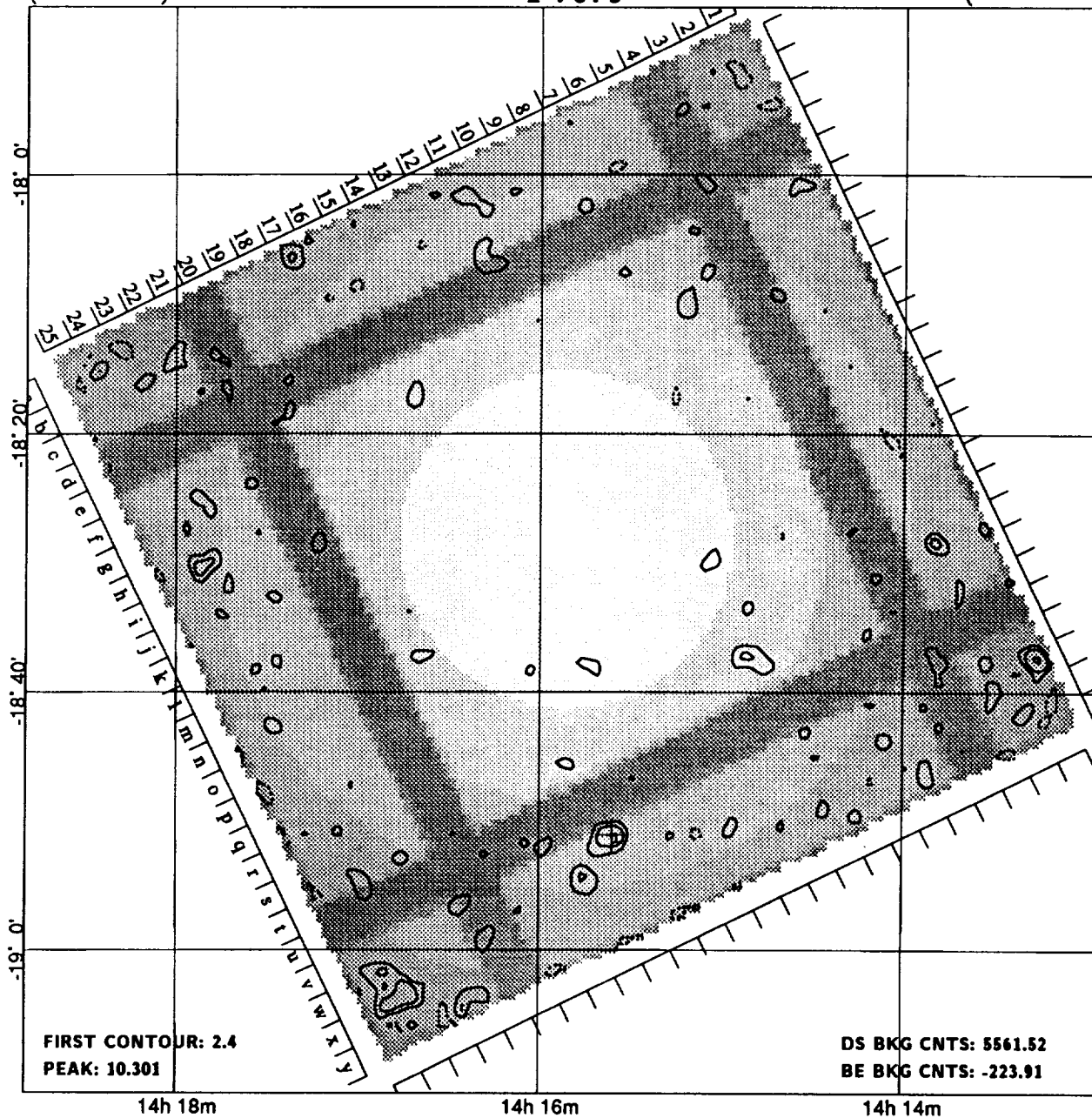
DATE: 1980/357 - 1980/357  
 LIVETIME: 4316.2s  
 ROLL ANGLE:  $-128.3^{\circ}$

NH:  $2.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 15m)

I 7679

(14h 15m)



## HD 125248, EMISSION FROM MAGNETIC AND NON-MAGNETIC AP STARS

FIELD CENTER: 14<sup>h</sup>15<sup>m</sup>52.0<sup>s</sup> -18°29'07" (B1950)  
14<sup>h</sup>18<sup>m</sup>38.4<sup>s</sup> -18°42'55" (J2000)  
 $\ell$ : 330.06  $b$ : 39.52

DATE: 1980/211 - 1980/211  
LIVETIME: 4506.7s  
ROLL ANGLE: 64.1°

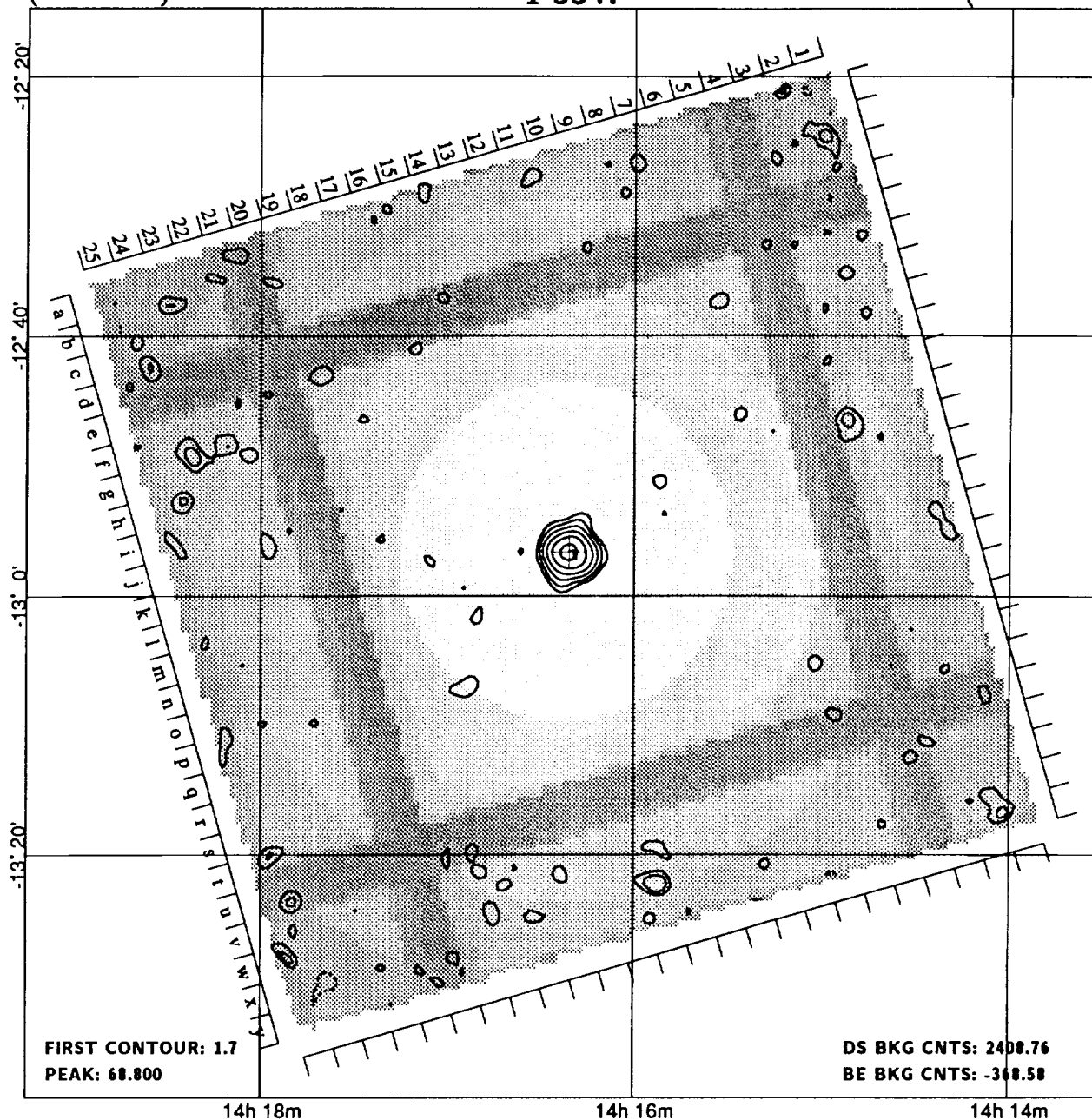
NH: 7.3E+20  
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3233	1	14 15 35.9	-18 51 02	53	*0.0092	0.0024	19.2	6.8	3.8	0.9	703	22.0	H	

(14h 16m)

I 5347

(14h 16m)



## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $14^{\text{h}}16^{\text{m}}22.5^{\text{s}}$   $-12^{\circ}56'46''$  (B1950)  
 $14^{\text{h}}19^{\text{m}}05.0^{\text{s}}$   $-13^{\circ}10'33''$  (J2000)  
 $\ell$ : 333.52  $b$ : 44.43

DATE: 1980/216 - 1980/216  
 LIVETIME: 1951.9s  
 ROLL ANGLE:  $74.0^{\circ}$

NH:  $6.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

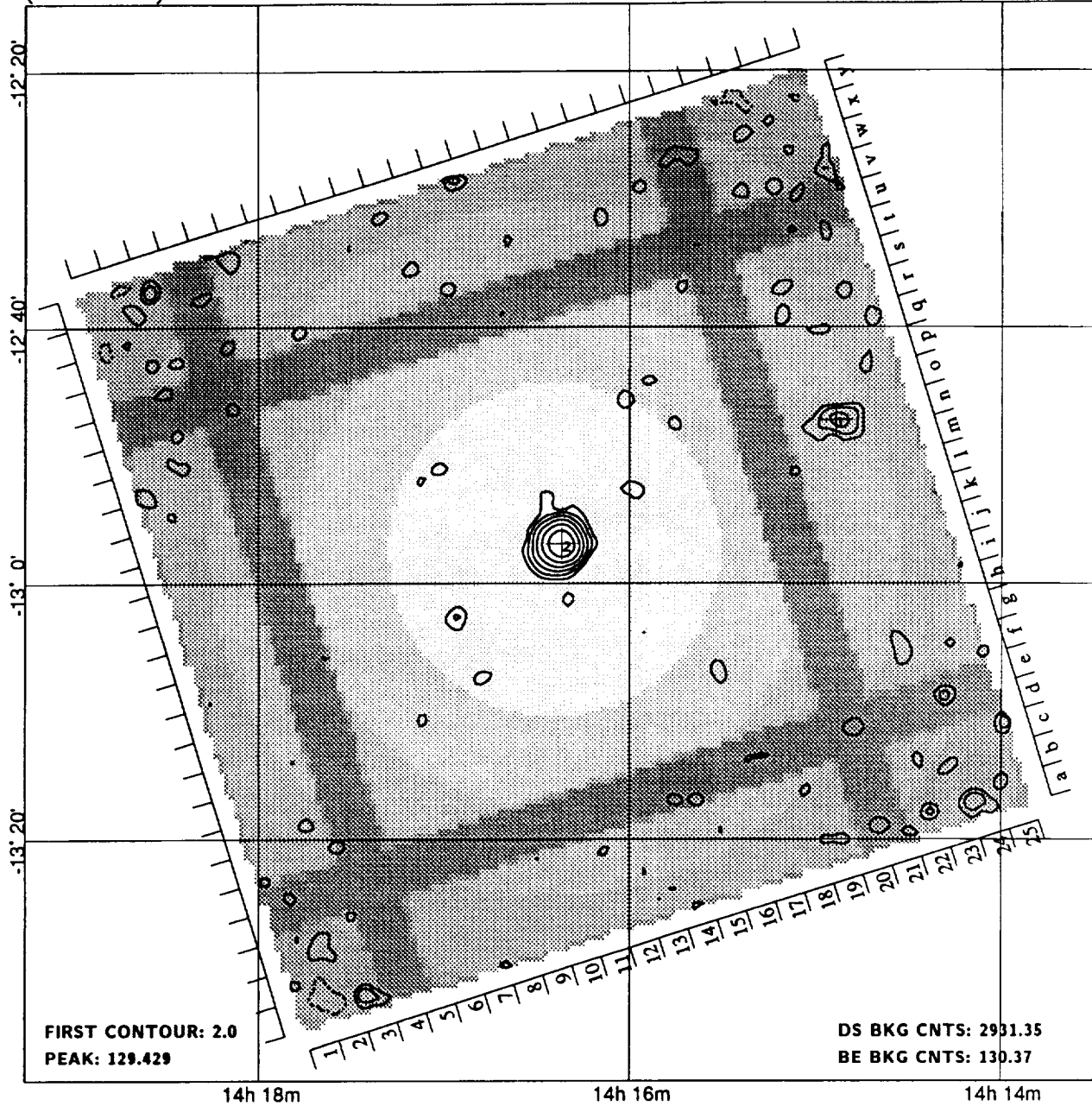
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3238	1	14 16 20.8	-12 56 39	31	0.197	0.012	287.5	4.5	16.8	1.2	0	0.4	AH	Q



(14h 16m)

I 10373

(14h 16m)



## PG 1416-12, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^h 16^m 22.5^s$   $-12^\circ 56' 46''$  (B1950)  
 $14^h 19^m 05.0^s$   $-13^\circ 10' 33''$  (J2000)  
 $l: 333.52$   $b: 44.43$

DATE: 1981/ 30 - 1981/ 30  
 LIVETIME: 2375.4s  
 ROLL ANGLE:  $-107.3^\circ$

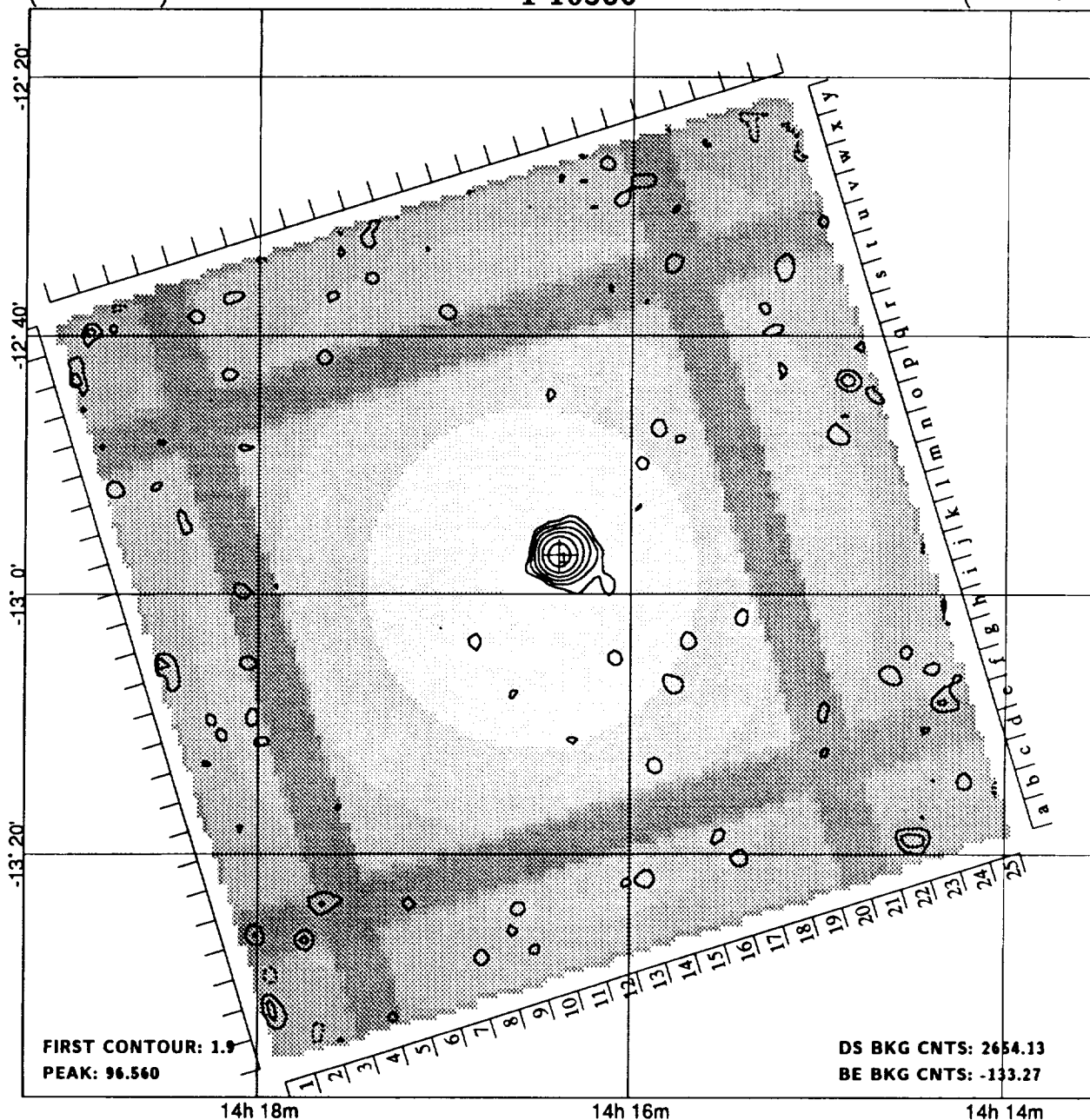
NH:  $6.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3227	1	14 14 53.4	-12 47 09	52	0.0223	0.0051	23.3	4.7	4.4	1.1	0	24.1	AH	
3238	2	14 16 21.9	-12 56 54	31	0.292	0.013	516.2	7.8	22.5	1.1	0	0.2	AH	Q

(14h 16m)

I 10386

(14h 16m)



## PG 1416-12, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^{\text{h}}16^{\text{m}}22.5^{\text{s}}$   $-12^{\circ}56'46''$  (B1950)  
 $14^{\text{h}}19^{\text{m}}05.0^{\text{s}}$   $-13^{\circ}10'33''$  (J2000)  
 $l: 333.52$   $b: 44.43$

DATE: 1981/ 30 - 1981/ 30  
 LIVETIME: 2150.7s  
 ROLL ANGLE:  $-107.2^{\circ}$

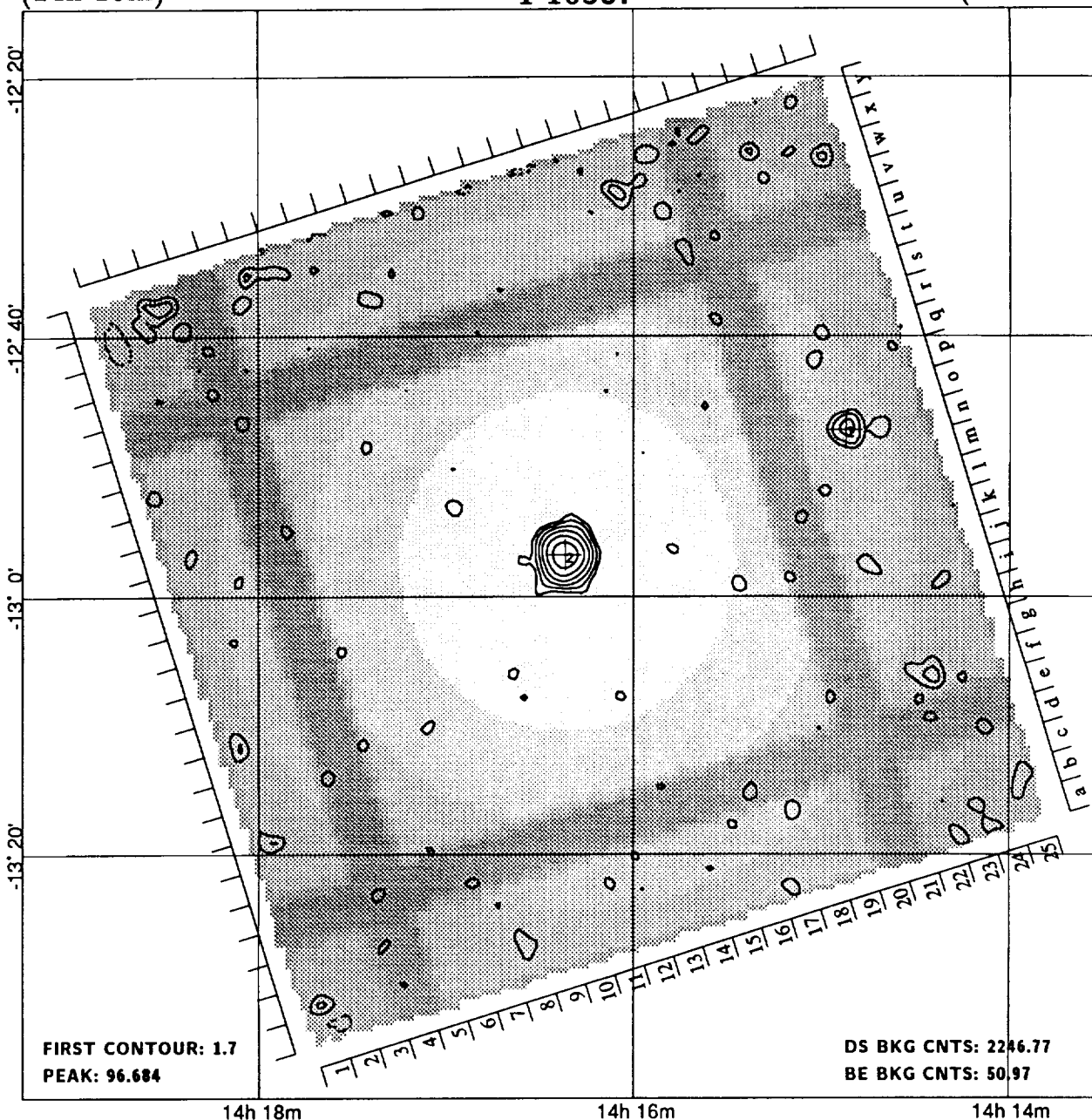
NH:  $6.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3238	1	14 16 23.0	-12 56 55	31	0.257	0.013	405.4	5.6	20.0	1.2	0	0.4	AH	Q

(14h 16m)

I 10387

(14h 16m)



## PG 1416-12, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^h 16^m 22.5^s$   $-12^\circ 56' 46''$  (B1950)  
 $14^h 19^m 05.0^s$   $-13^\circ 10' 33''$  (J2000)  
 $l$ : 333.52  $b$ : 44.43

DATE: 1981/ 31 - 1981/ 31  
 LIVETIME: 1820.6s  
 ROLL ANGLE:  $-107.2^\circ$

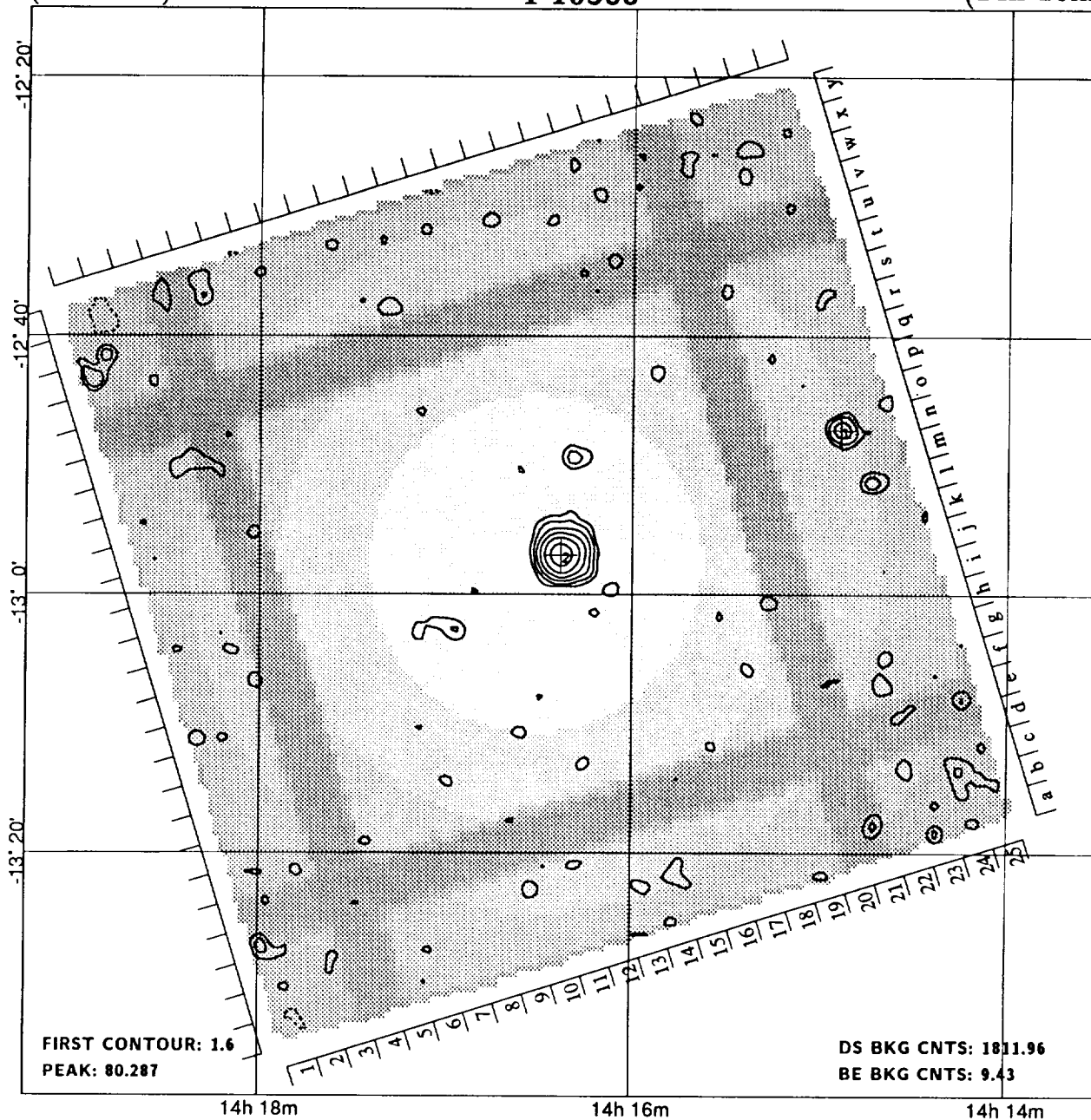
NH:  $6.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3227	1	14 14 52.1	-12 47 11	52	0.0238	0.0059	19.5	3.5	4.1	0.9	0	24.1	AH	
3238	2	14 16 21.9	-12 56 47	31	0.316	0.015	429.5	5.5	20.6	1.2	0	0.2	AH	Q

(14h 16m)

I 10388

(14h 16m)



## PG 1416-12, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^{\text{h}}16^{\text{m}}22.5^{\text{s}}$   $-12^{\circ}56'46''$  (B1950)  
 $14^{\text{h}}19^{\text{m}}05.0^{\text{s}}$   $-13^{\circ}10'33''$  (J2000)  
 $l: 333.52$   $b: 44.43$

DATE: 1981/ 32 - 1981/ 32  
 LIVETIME: 1468.3s  
 ROLL ANGLE:  $-107.2^{\circ}$

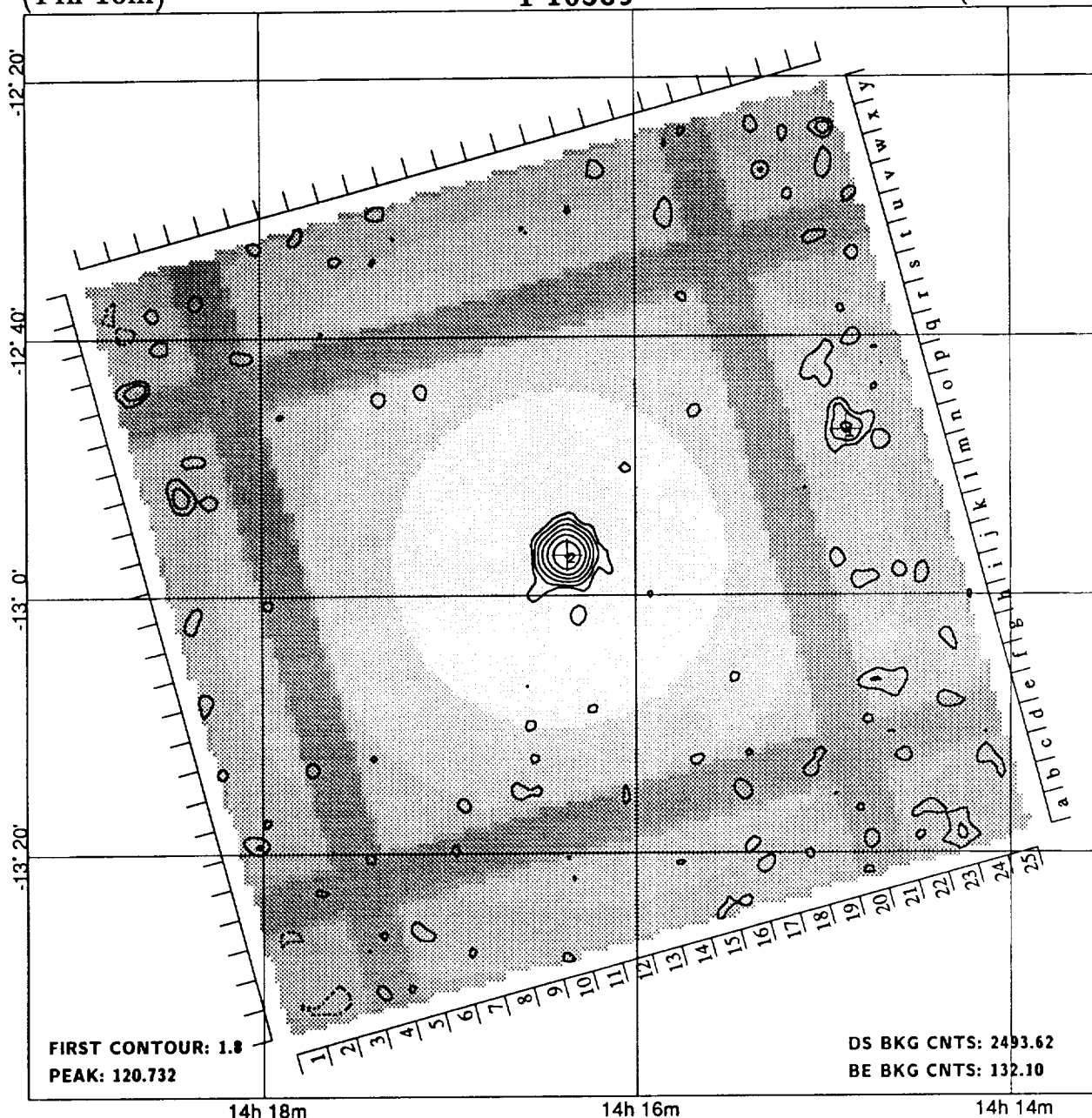
NH:  $6.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3227	1	14 14 53.3	-12 47 15	52	0.0277	0.0073	17.0	3.0	3.8	0.9	0	23.6	AH	
3238	2	14 16 22.9	-12 56 59	31	0.295	0.017	319.3	4.7	17.7	1.2	0	0.2	AH	Q

(14h 16m)

I 10389

(14h 16m)



## PG 1416-12, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^h 16^m 22.5^s$   $-12^\circ 56' 46''$  (B1950)  
 $14^h 19^m 05.0^s$   $-13^\circ 10' 33''$  (J2000)  
 $l: 333.52$   $b: 44.43$

DATE: 1981/ 33 - 1981/ 33  
 LIVETIME: 2020.7s  
 ROLL ANGLE:  $-105.2^\circ$

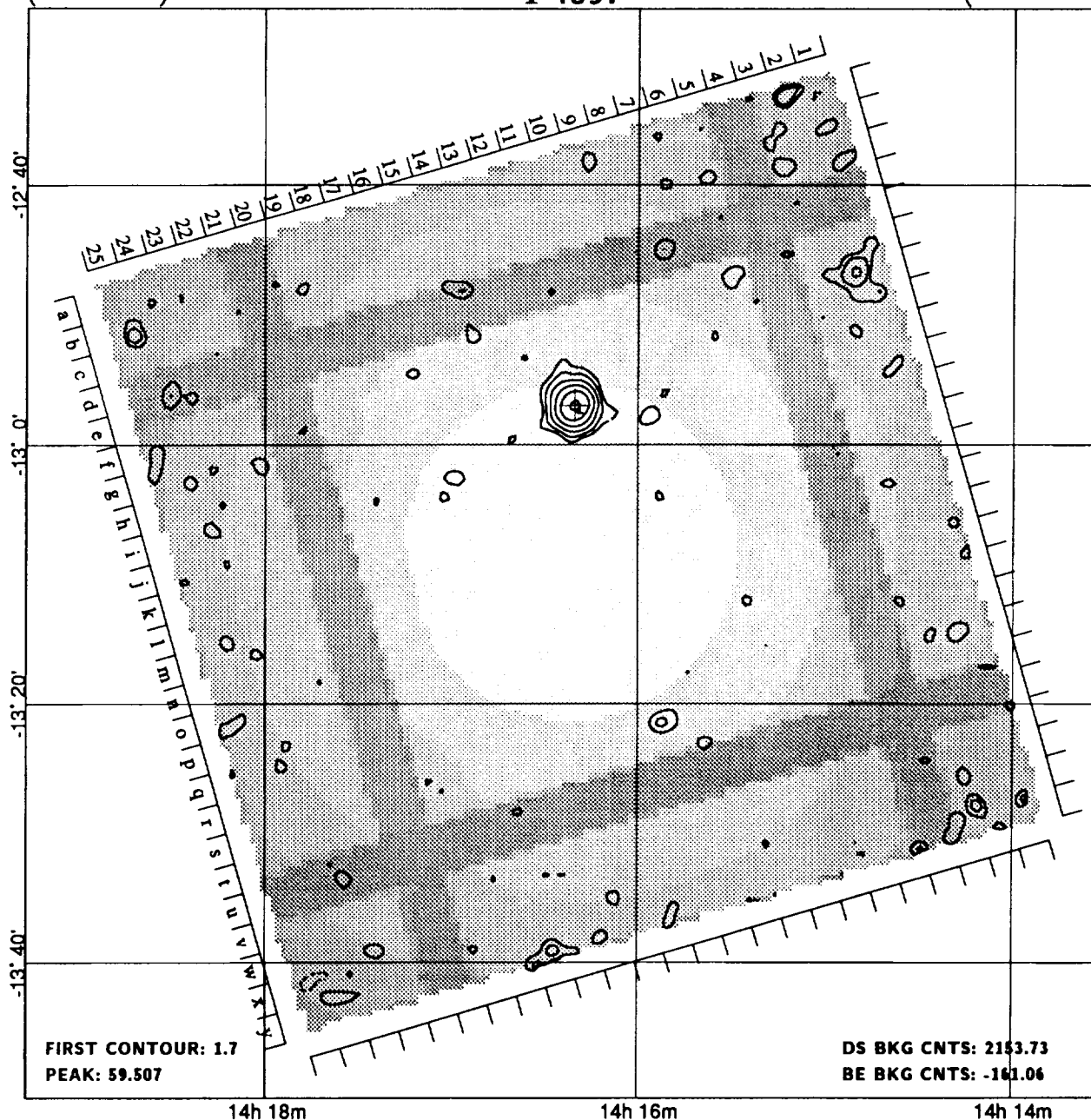
NH:  $6.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3227	1	14 14 52.5	-12 47 12	55	0.0183	0.0051	16.2	3.8	3.6	1.1	0	23.8	AH	
3238	2	14 16 22.0	-12 56 53	31	0.321	0.015	483.2	6.8	21.8	1.1	0	0.2	AH	Q

(14h 16m)

I 4897

(14h 16m)



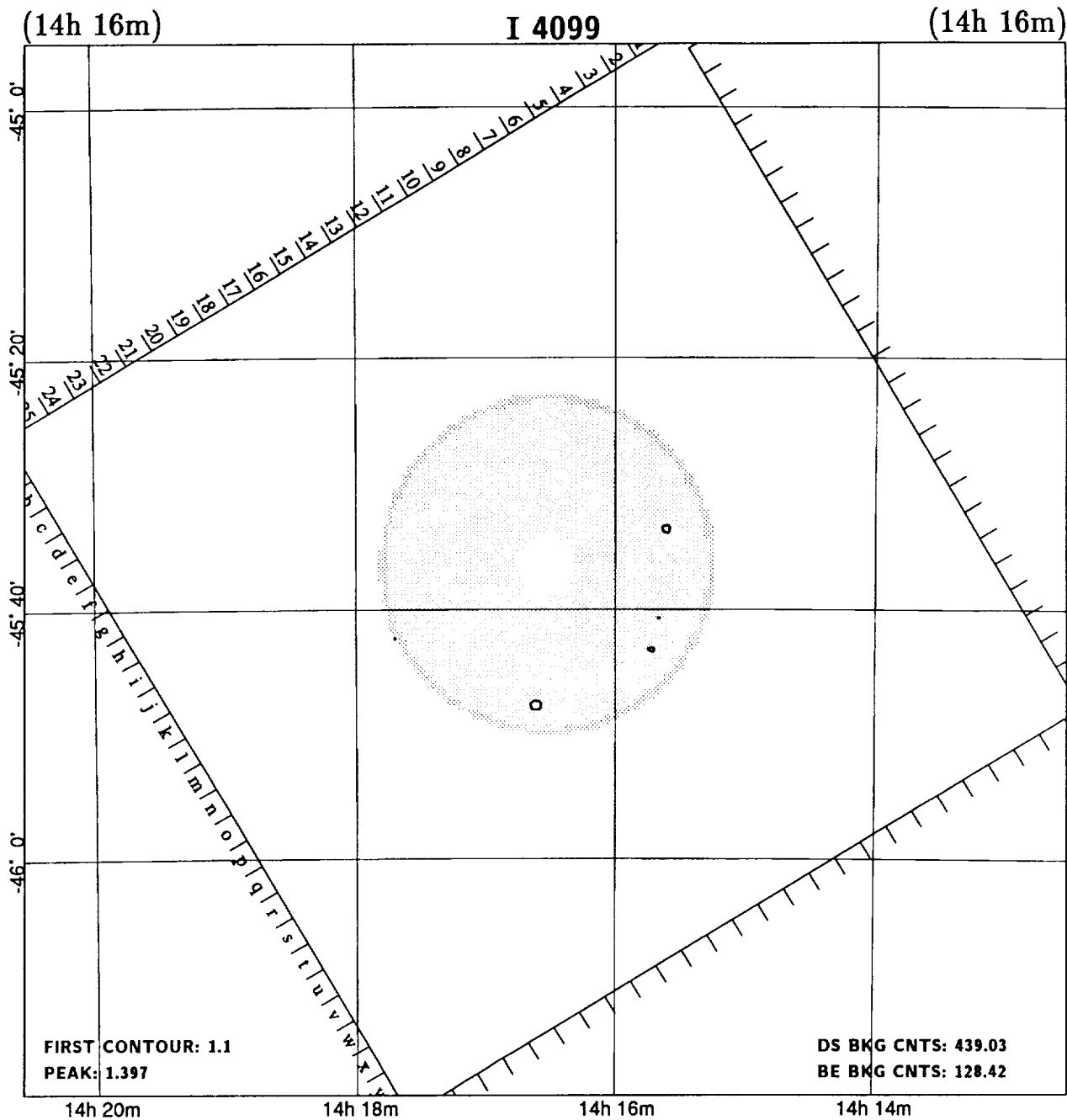
## STAR LAMBDA VIR (HD 125337), AP STARS

FIELD CENTER:  $14^h 16^m 24.0^s$   $-13^\circ 08' 31''$  (B1950)  
 $14^h 19^m 06.6^s$   $-13^\circ 22' 17''$  (J2000)  
 $\ell$ : 333.40  $b$ : 44.25

DATE: 1980/ 36 - 1980/197  
 LIVETIME: 1745.2s  
 ROLL ANGLE:  $73.9^\circ$

NH:  $6.8E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3238	1	14 16 20.3	-12 56 59	38	0.178	0.013	202.8	4.2	14.1	1.2	0	11.6	AH	Q



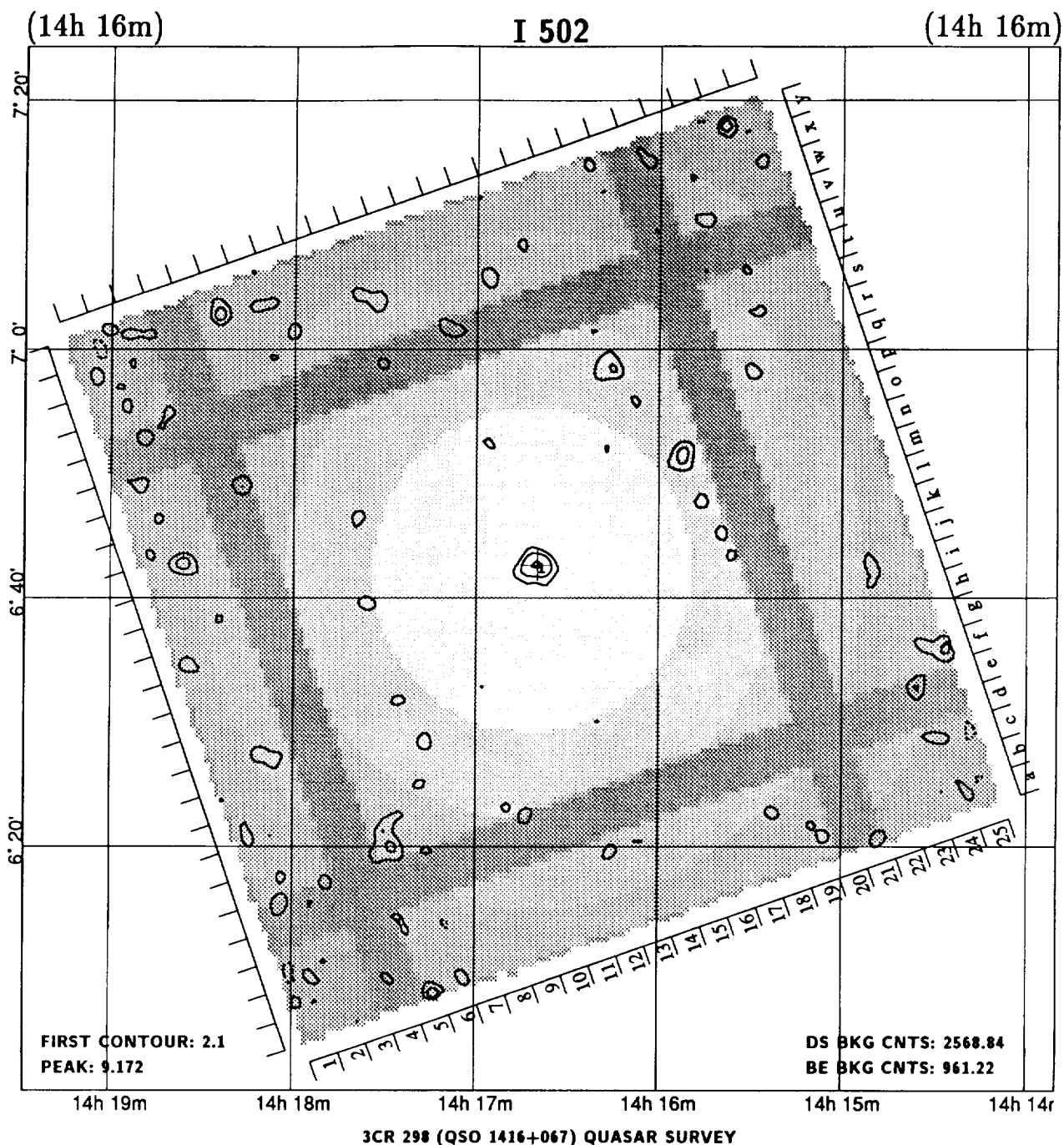
**H1409-45 POSITION**

**FIELD CENTER:**  $14^h 16^m 32.0^s$   $-45^\circ 36' 53''$  (B1950)  
 $14^h 19^m 44.6^s$   $-45^\circ 50' 39''$  (J2000)  
 $l: 318.61$   $b: 14.32$

**DATE:** 1979/240 - 1979/240  
**LIVETIME:** 355.8s  
**ROLL ANGLE:**  $59.1^\circ$

**NH:**  $1.3E+21$   
**REF/ID:**  
**FIELD FLAGS:**





FIELD CENTER:  $14^h 16^m 39.1^s$   $06^\circ 42' 20''$  (B1950)  
 $14^h 19^m 08.5^s$   $06^\circ 28' 34''$  (J2000)  
 $l: 352.16$   $b: 60.67$

DATE: 1979/ 24 - 1979/ 24  
 LIVETIME: 2081.6s  
 ROLL ANGLE:  $-109.1^\circ$

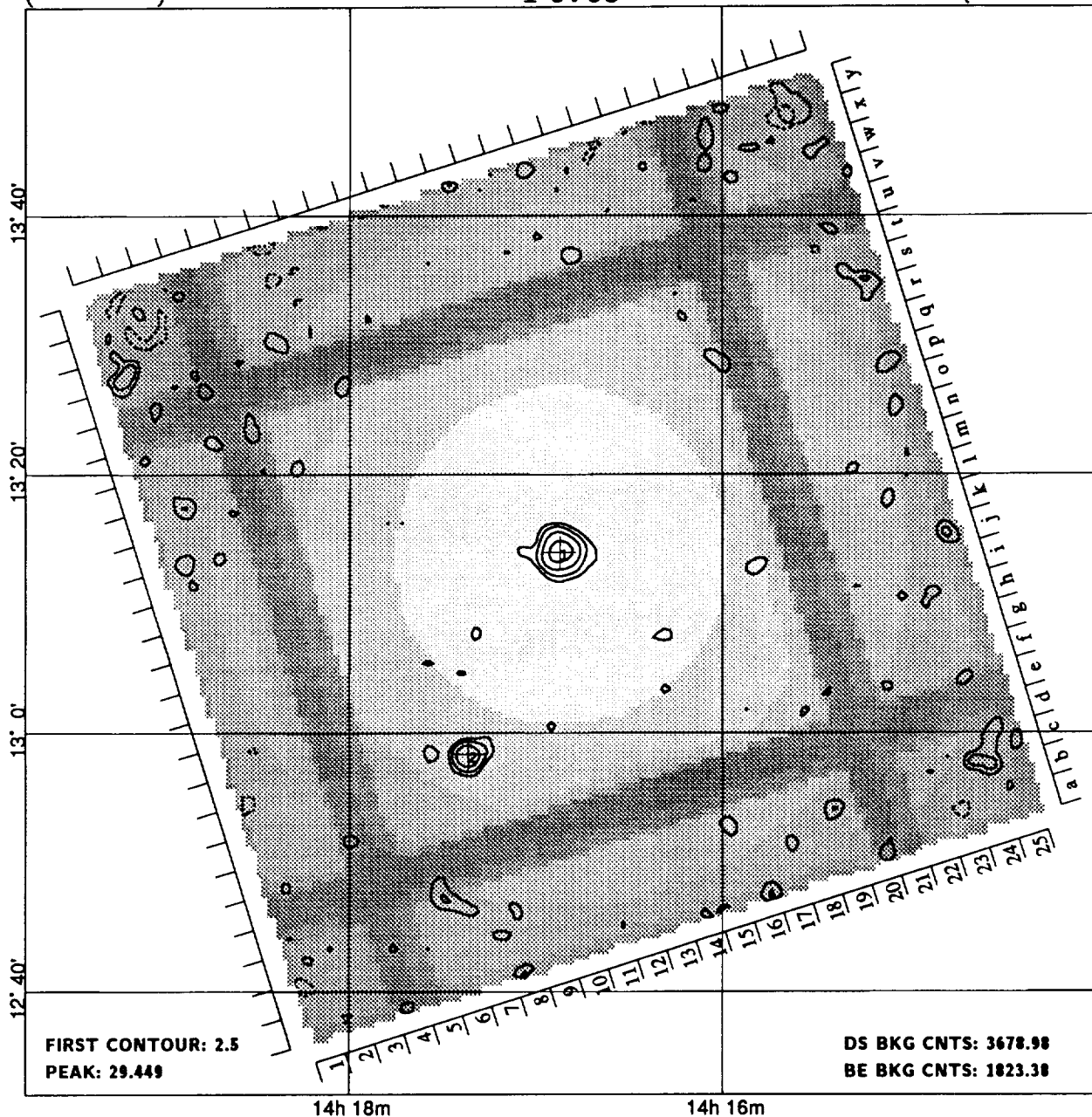
NH:  $2.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3240	1	14 16 39.8	06 42 37	35	0.0255	0.0045	39.5	9.5	5.6	0.9	0	0.6	H	Q

(14h 16m)

I 9705

(14h 16m)



F0-G5 STARS: HR 5365

FIELD CENTER:  $14^h 16^m 51.0^s$   $13^\circ 14' 02''$  (B1950) $14^h 19^m 15.9^s$   $13^\circ 00' 17''$  (J2000) $\ell$ : 2.76  $b$ : 65.08

DATE: 1981/ 26 - 1981/ 26

LIVETIME: 2981.2s

ROLL ANGLE:  $-107.4^\circ$ NH:  $1.6E+20$ 

REF/ID:

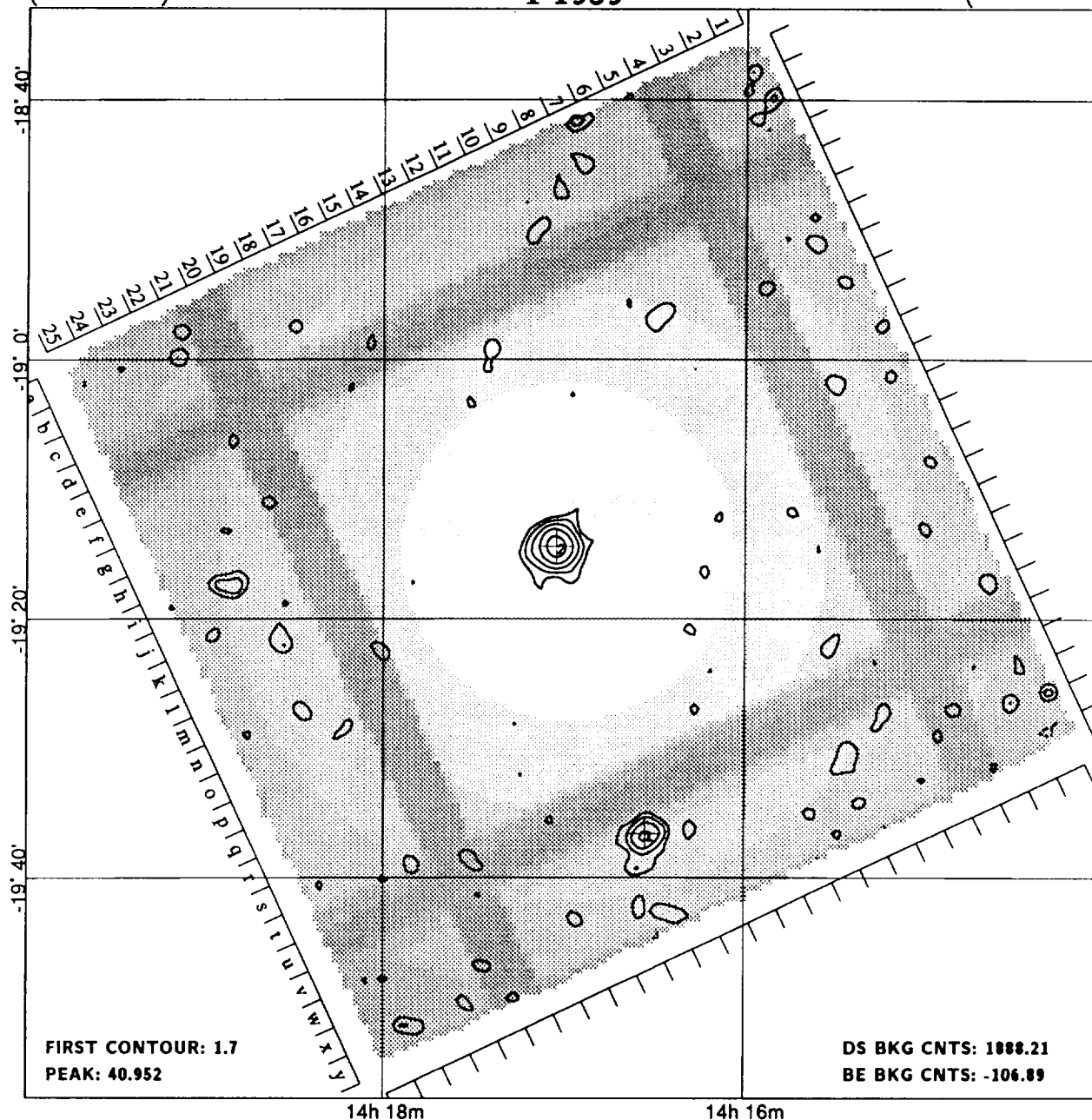
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3242	1L	14 16 52.4	13 13 58	31	0.0488	0.0062	108.5	33.5	7.7	1.2	0	0.2		S
3247	2L	14 17 21.8	12 58 20	50	0.0278	0.0053	46.3	11.7	5.1	1.1	0	17.3		

(14h 17m)

I 1959

(14h 17m)



## PKS 1417-19: SEYFERT AND N-TYPE GALAXIES

FIELD CENTER:  $14^h 17^m 00.0^s$   $-19^\circ 14' 59''$  (B1950)  
 $14^h 19^m 47.1^s$   $-19^\circ 28' 44''$  (J2000)  
 $l: 329.95$   $b: 38.71$

DATE: 1979/203 - 1979/203  
 LIVETIME: 1530.1s  
 ROLL ANGLE:  $65.0^\circ$

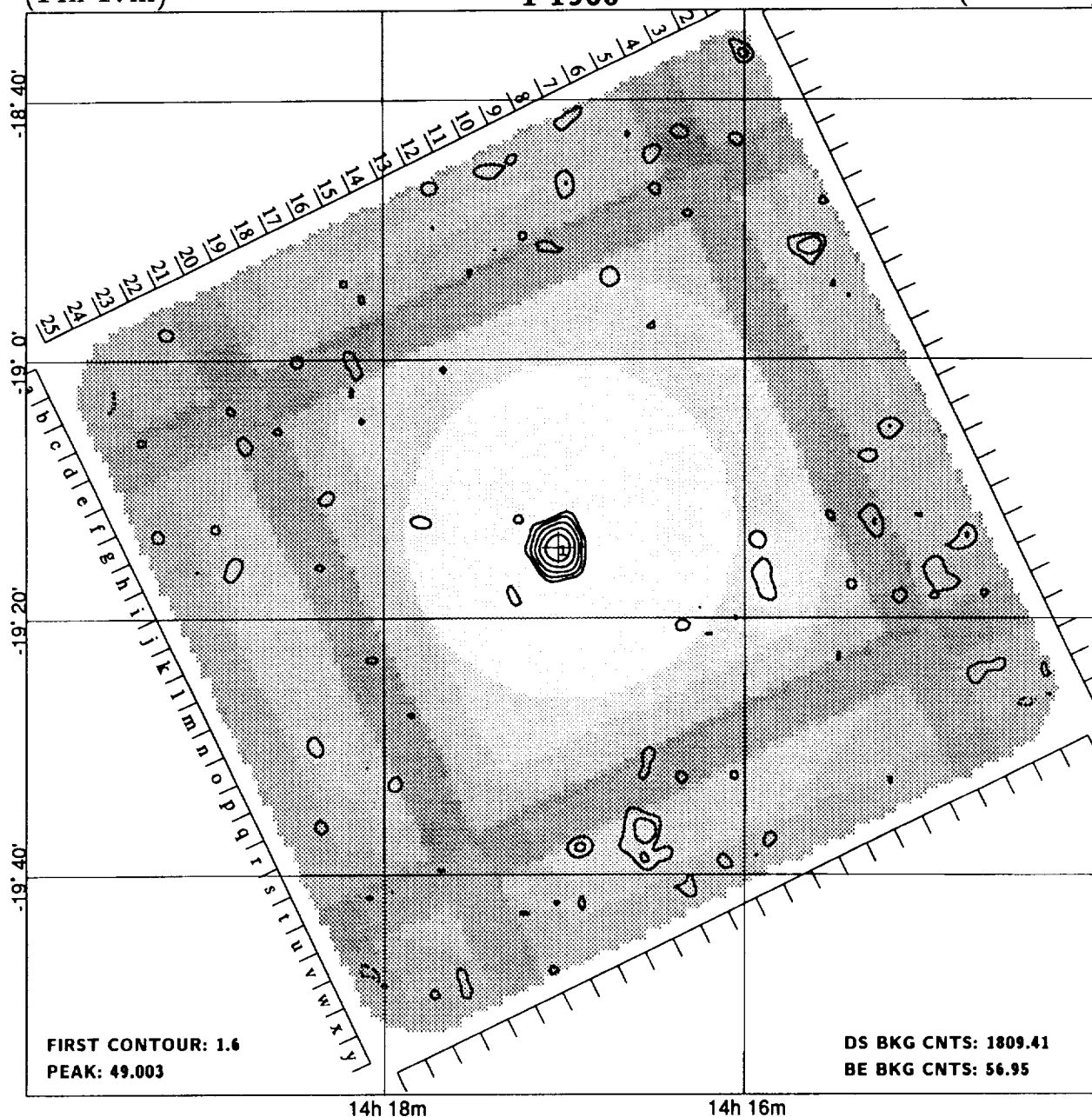
NH:  $7.5E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3239	1	14 16 32.7	-19 36 35	50	*0.0453	0.0083	32.4	2.6	5.5	1.1	502	22.6	H	
3244	2	14 17 02.5	-19 14 25	31	0.136	0.011	155.2	4.8	12.3	1.2	0	0.9	AH	

(14h 17m)

I 1960

(14h 17m)



## PKS 1417-19: SEYFERT AND N-TYPE GALAXIES

FIELD CENTER:  $14^h 17^m 00.0^s$   $-19^\circ 14' 59''$  (B1950)  
 $14^h 19^m 47.1^s$   $-19^\circ 28' 44''$  (J2000)  
 $l: 329.95$   $b: 38.71$

DATE: 1979/211 - 1979/211  
 LIVETIME: 1466.2s  
 ROLL ANGLE:  $64.3^\circ$

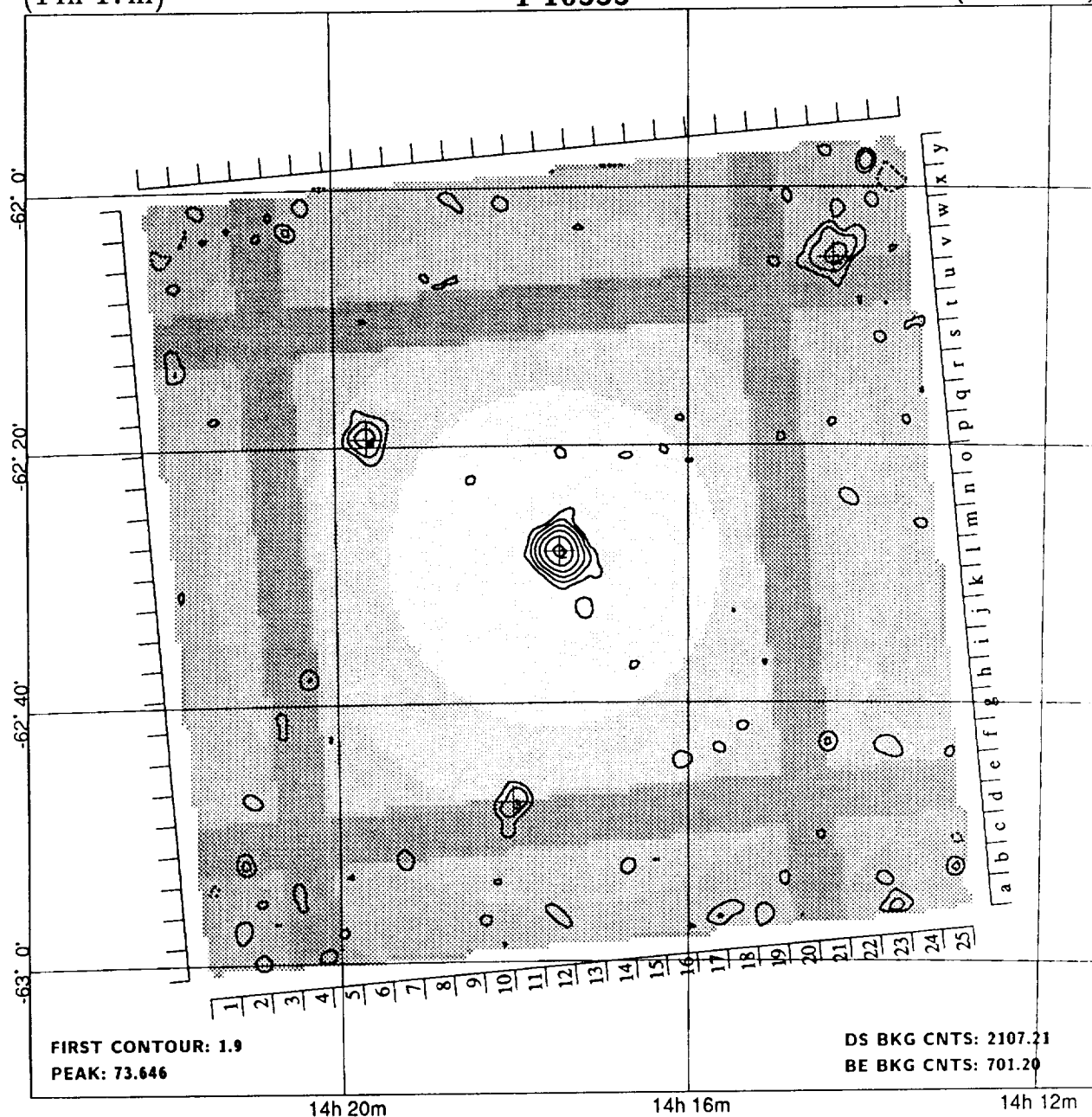
NH:  $7.5E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$ 0.013	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3244	1	14 17 02.0	-19 14 33	31	0.177	0.013	193.3	4.7	13.7	1.1	0	0.8	AH	

(14h 17m)

I 10353

(14h 17m)

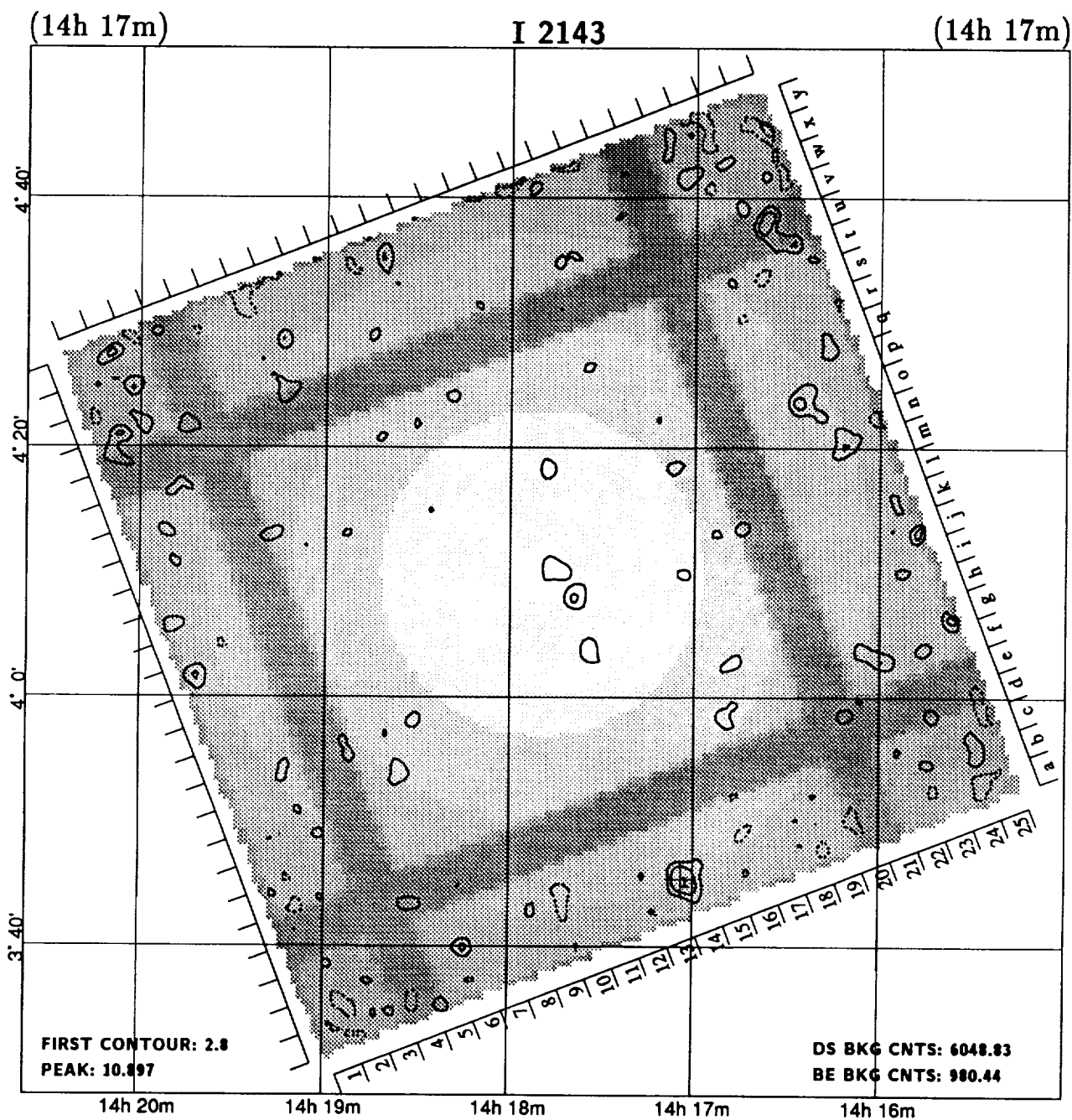


FIELD CENTER:  $14^h 17^m 25.9^s$   $-62^\circ 28' 15''$  (B1950)  
 $14^h 21^m 13.2^s$   $-62^\circ 41' 58''$  (J2000)  
 $l: 313.02$   $b: -1.60$

DATE: 1981/ 16 - 1981/ 16  
 LIVETIME: 1707.5s  
 ROLL ANGLE:  $-94.8^\circ$

NH:  $1.2E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3225	1	14 14 22.6	-62 05 22	56	*0.0329	0.0083	17.8	2.2	4.0	1.6	906	30.6	AH	
3248	2	14 17 27.6	-62 28 08	31	0.217	0.013	275.7	7.3	16.4	1.2	0	0.4	H	P
3250	3	14 18 00.5	-62 47 35	55	*0.0213	0.0052	19.1	2.9	4.1	1.0	906	19.8	H	
3254	4	14 19 38.5	-62 19 25	51	0.0346	0.0066	32.5	5.5	5.3	1.0	0	17.8	H	



X-RAY SURVEY OF NORMAL GALAXIES: NGC5566

FIELD CENTER:  $14^h 17^m 48.0^s$   $04^\circ 09' 59''$  (B1950)  
 $14^h 20^m 19.0^s$   $03^\circ 56' 16''$  (J2000)  
 $l: 349.27$   $b: 58.57$

DATE: 1980/ 18 - 1980/ 18  
 LIVETIME: 4901.6s  
 ROLL ANGLE:  $-111.1^\circ$

NH:  $2.3E+20$   
 REF/ID:  
 FIELD FLAGS:

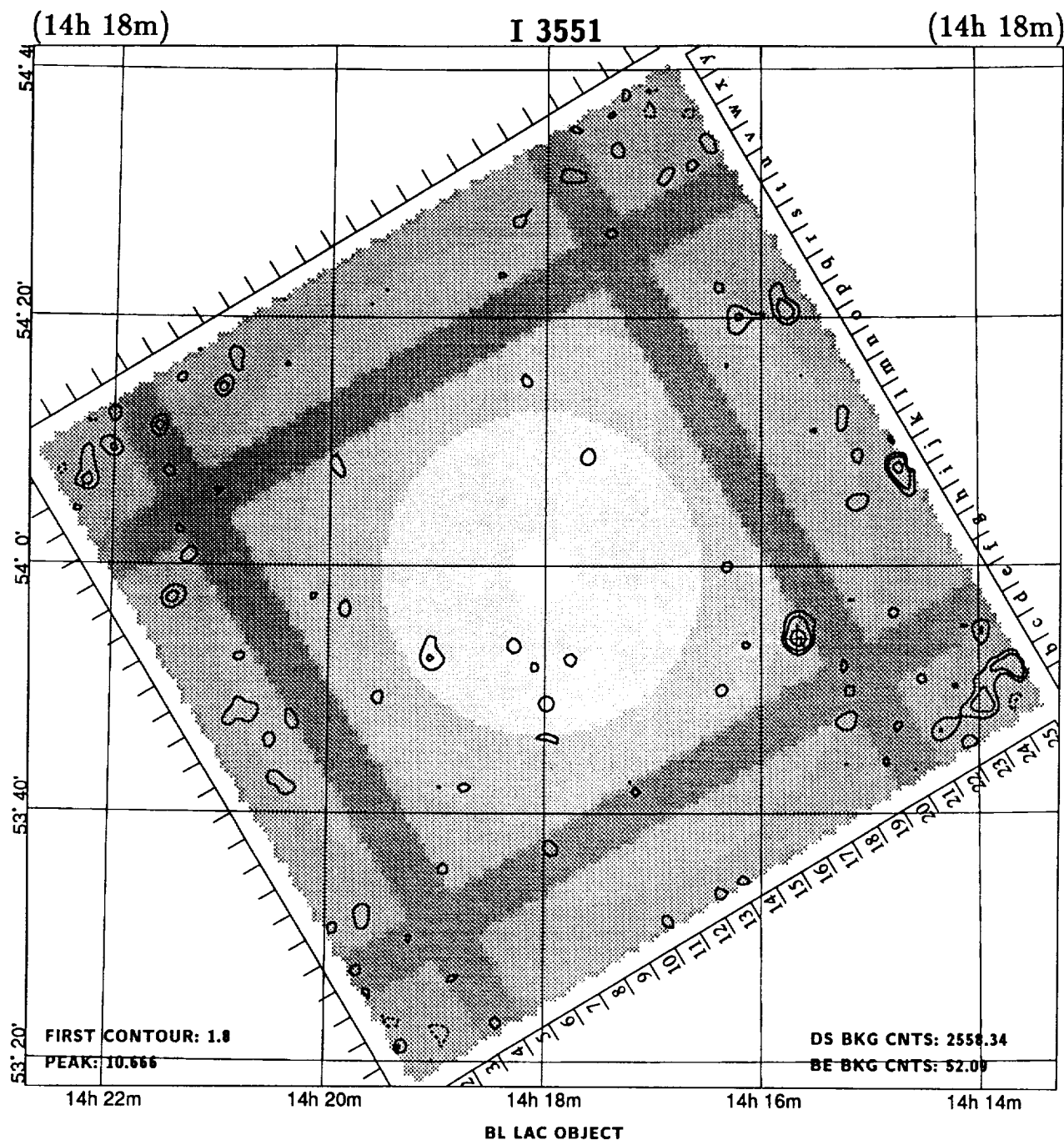
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3245	1	14 17 03.8	03 45 21	55	0.0115	0.0030	22.3	11.7	3.8	0.9	0	26.8	H	

(14h 18m)



**NH: 2.4E+20**  
**REF/ID:**  
**FIELD FLAGS:**



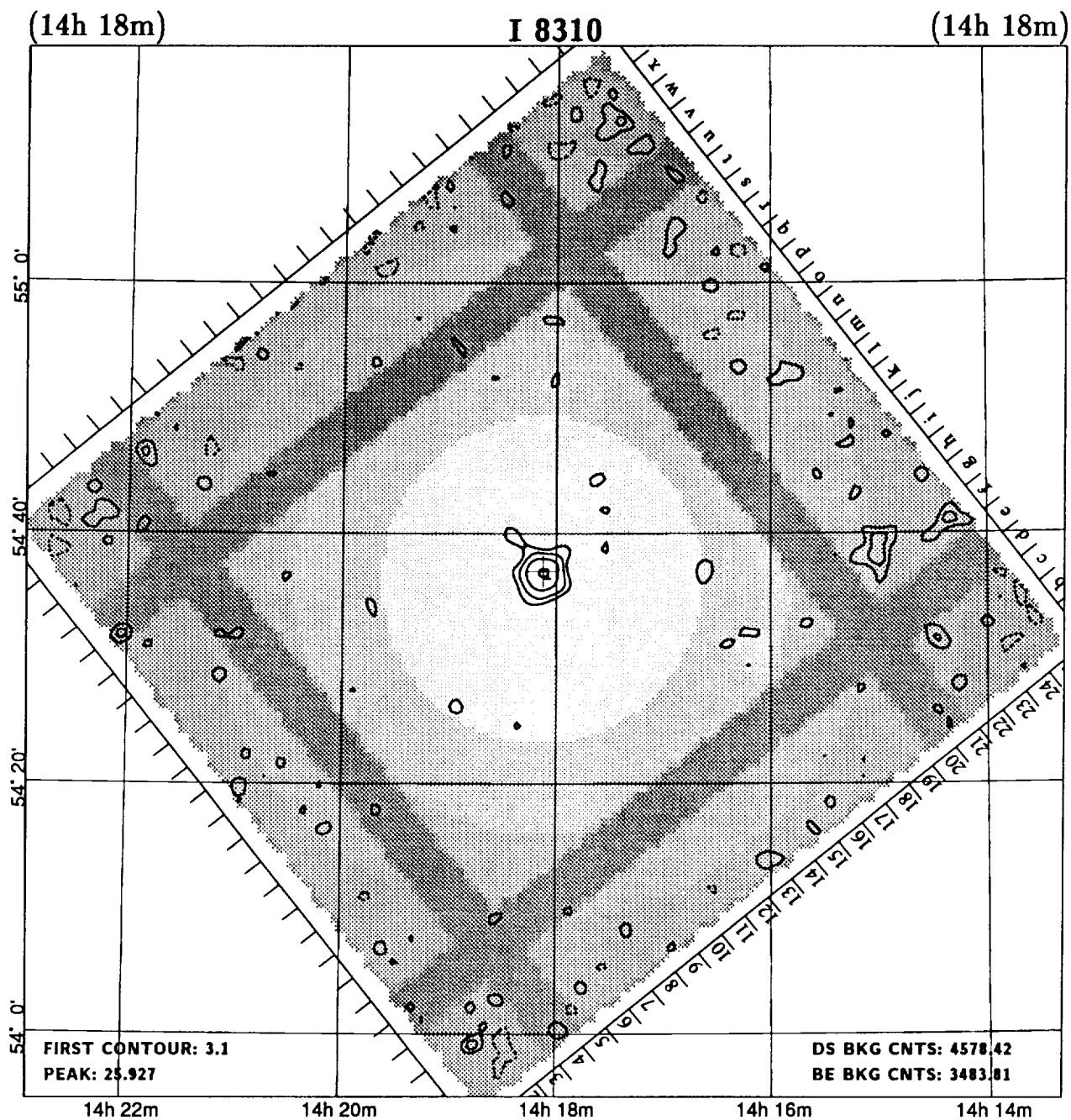


FIELD CENTER:  $14^h 18^m 00.0^s$   $53^\circ 59' 59''$  (B1950)  
 $14^h 19^m 41.6^s$   $53^\circ 46' 16''$  (J2000)  
 $l: 97.56$   $b: 58.79$

DATE: 1980/ 2 - 1980/ 2  
 LIVETIME: 2073.1s  
 ROLL ANGLE:  $-121.1^\circ$

NH:  $1.2E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3234	1	14 15 40.3	53 54 08	51	*0.0189	0.0048	19.1	4.9	3.9	0.9	601	21.4	H	



**BL LAC OBJECT**

FIELD CENTER:  $14^{\text{h}}18^{\text{m}}06.7^{\text{s}}$   $54^{\circ}36'56''$  (B1950)  
 $14^{\text{h}}19^{\text{m}}47.1^{\text{s}}$   $54^{\circ}23'13''$  (J2000)  
 $l: 98.30$   $b: 58.31$

DATE: 1980/356 - 1980/356  
 LIVETIME: 3710.1s  
 ROLL ANGLE:  $-128.7^{\circ}$

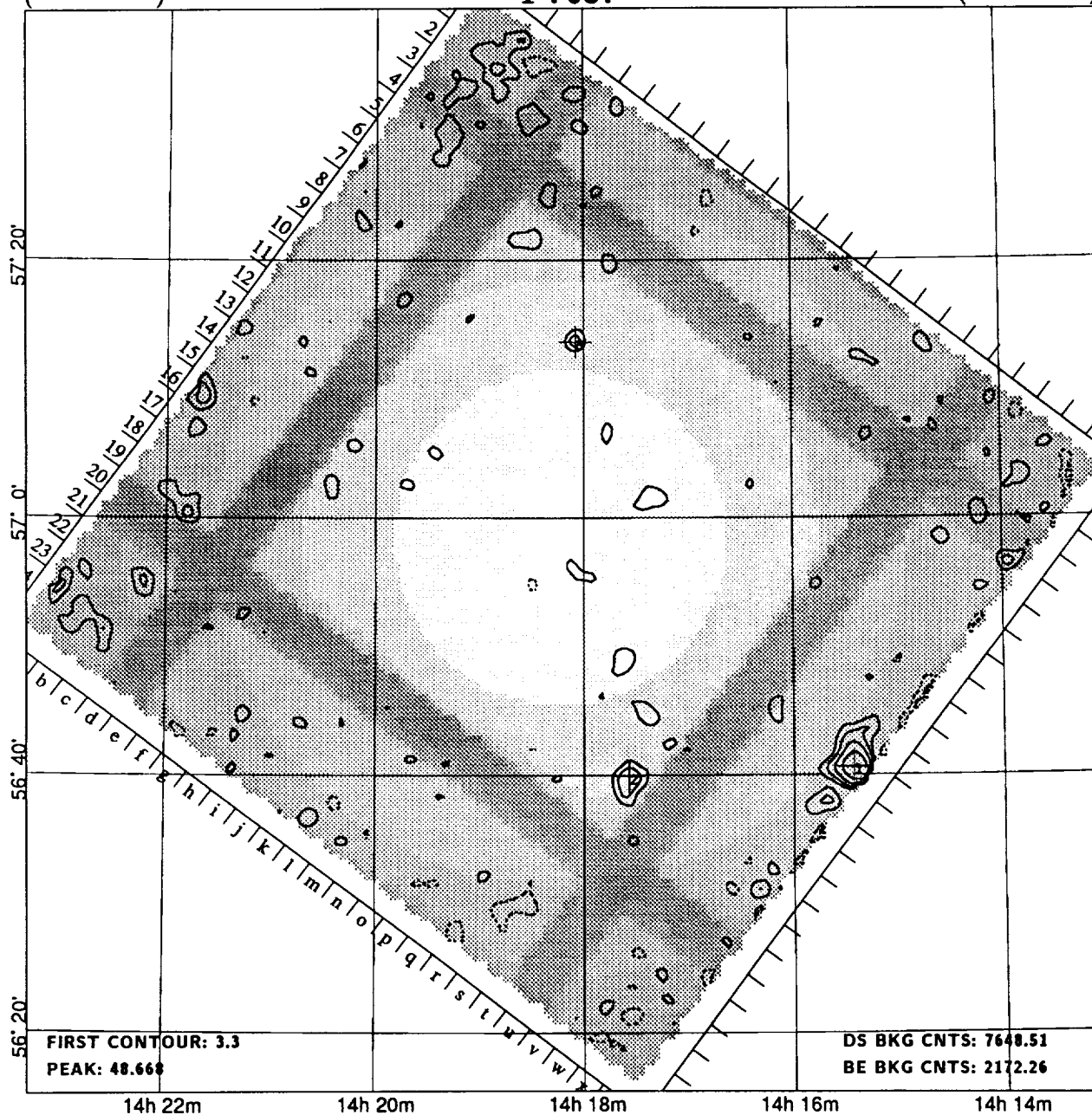
NH:  $1.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3253	1L	14 18 07.5	54 36 59	31	0.0333	0.0051	92.0	46.0	6.4	1.3	0	0.2		

(14h 18m)

I 7637

(14h 18m)



NGC 5585, DWARF GAL OF M101 GROUP

FIELD CENTER:  $14^{\text{h}}18^{\text{m}}12.0^{\text{s}}$   $56^{\circ}57'29''$  (B1950)  
 $14^{\text{h}}19^{\text{m}}47.4^{\text{s}}$   $56^{\circ}43'46''$  (J2000)  
 $l: 101.00$   $b: 56.48$

DATE: 1980/154 - 1980/155  
 LIVETIME: 6197.9s  
 ROLL ANGLE:  $36.8^{\circ}$

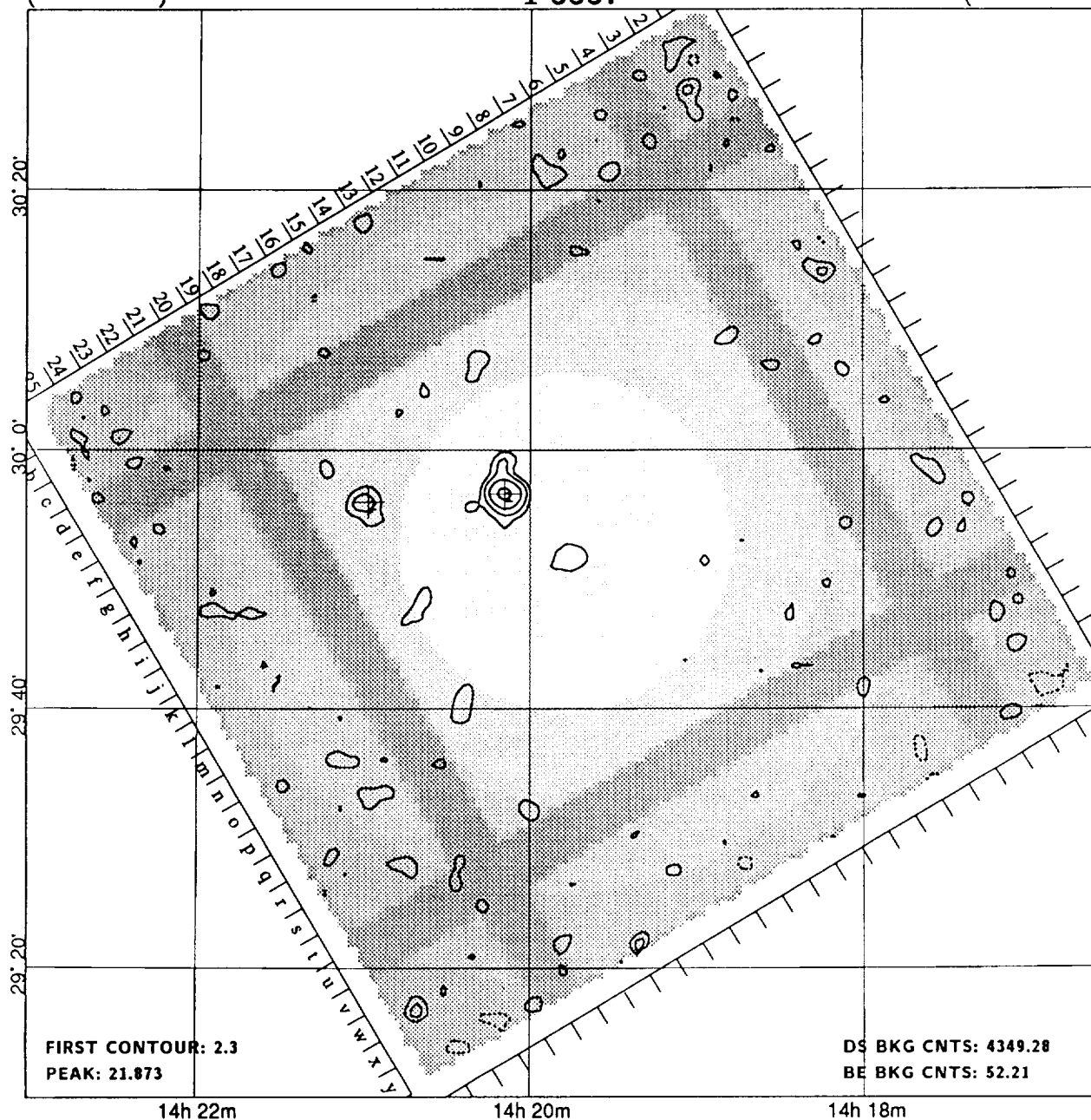
NH:  $1.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3231	1	14 15 25.9	56 40 35	48	*0.0475	0.0052	98.3	18.7	9.1	1.1	501	28.2	EH	
3249	2	14 17 34.2	56 39 52	51	0.0090	0.0021	29.0	19.0	4.2	0.9	200	18.4	H	
3251	3L	14 18 04.7	57 13 40	52	0.0076	0.0020	27.7	10.3	3.7	0.6	0	16.2		

(14h 19m)

I 5557

(14h 19m)



FIELD CENTER:  $14^h 19^m 48.0^s$   $29^\circ 51' 59''$  (B1950)  
 $14^h 21^m 59.7^s$   $29^\circ 38' 21''$  (J2000)  
 $l: 45.46$   $b: 69.96$

DATE: 1980/180 - 1980/180  
 LIVETIME: 3524.4s  
 ROLL ANGLE:  $59.3^\circ$

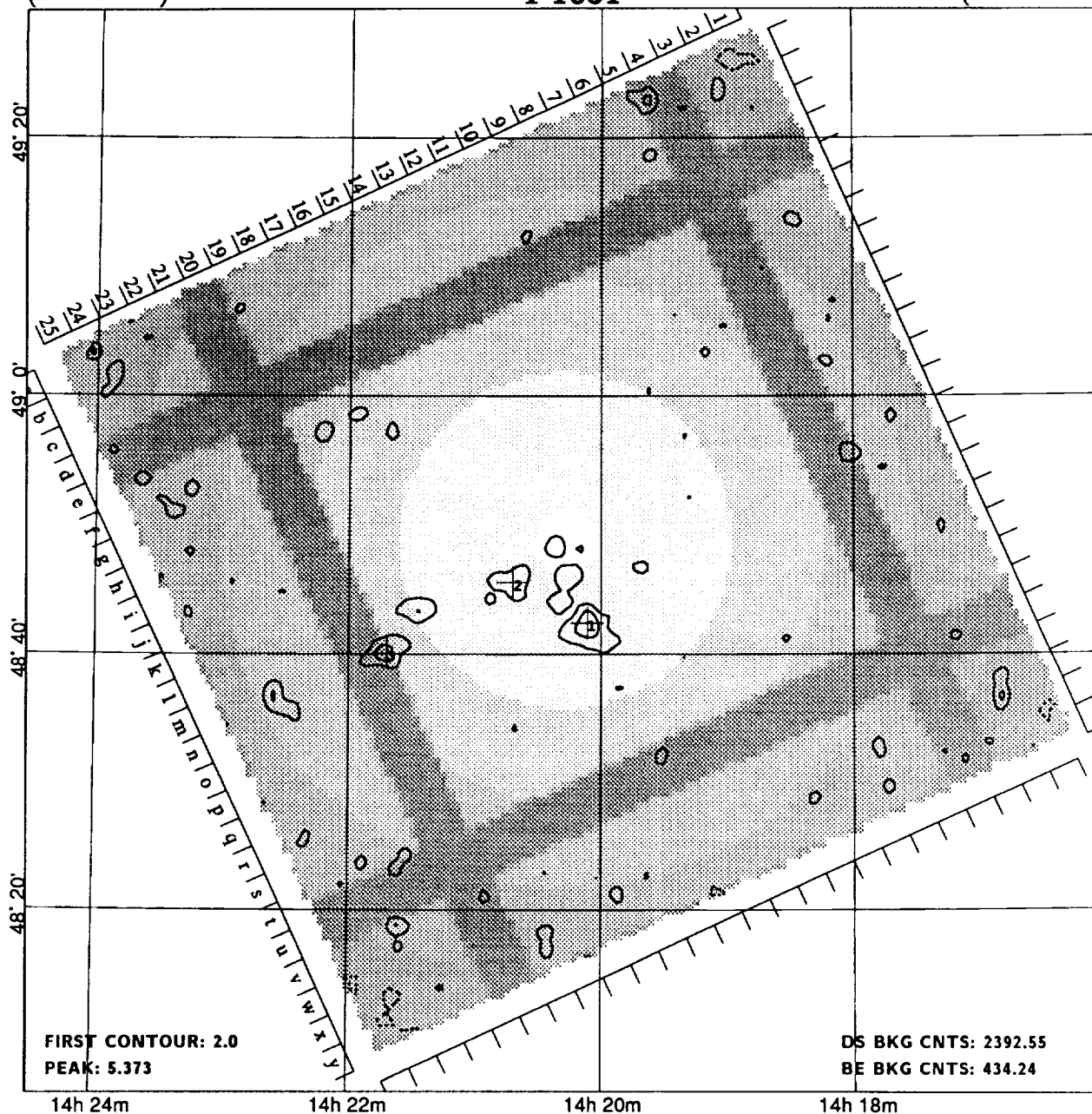
NH:  $1.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3256	1	14 20 09.2	29 56 36	38	0.0339	0.0039	84.0	11.0	8.6	1.2	0	6.4	H	
3258	2	14 20 58.6	29 55 59	55	0.0100	0.0026	20.5	7.5	3.9	0.9	0	16.3	H	

(14h 20m)

I 1851

(14h 20m)



## X-RAY STUDY OF CLUSTERS OF GALAXIES: A1904

FIELD CENTER:  $14^h 20^m 18.0^s$   $48^\circ 47' 59''$  (B1950)  
 $14^h 22^m 07.8^s$   $48^\circ 34' 22''$  (J2000)  
 $l: 89.67$   $b: 62.28$

DATE: 1979/193 - 1979/193  
 LIVETIME: 1938.8s  
 ROLL ANGLE:  $65.3^\circ$

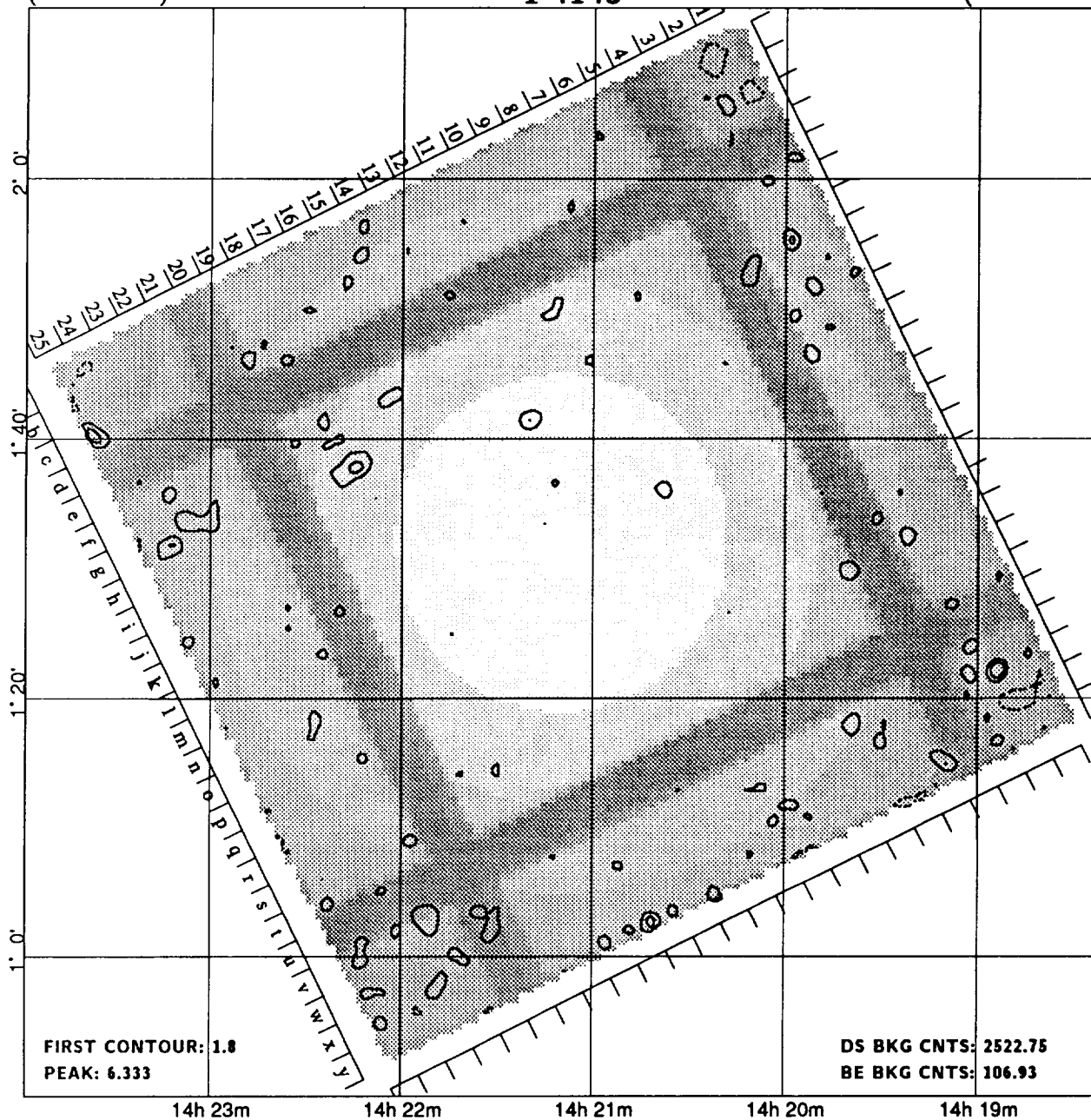
NH:  $1.8E+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3255	1	14 20 06.5	48 42 27	43	0.0161	0.0040	21.8	7.2	4.1	1.4	0	5.5	H	
3257	2	14 20 42.1	48 45 35	47	0.0150	0.0038	20.7	7.3	3.9	0.9	0	5.1	H	
3260	3	14 21 41.9	48 40 04	56	*0.0165	0.0043	18.1	3.9	3.9	0.9	905	15.8	H	

(14h 21m)

I 4145

(14h 21m)



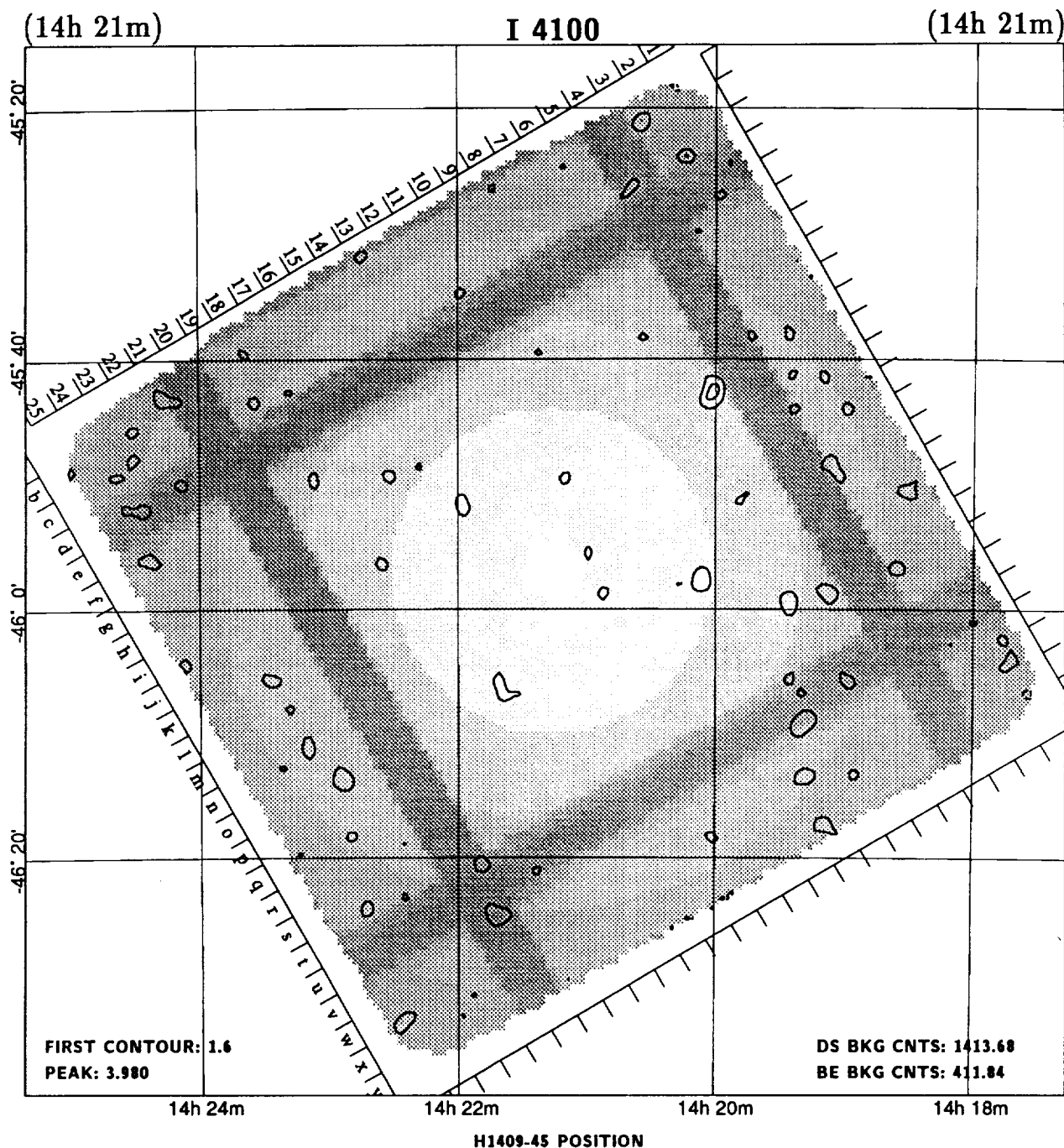
H1423+01 POSITION

FIELD CENTER:  $14^{\text{h}}21^{\text{m}}09.6^{\text{s}}$   $01^{\circ}31'11''$  (B1950)  
 $14^{\text{h}}23^{\text{m}}42.4^{\text{s}}$   $01^{\circ}17'37''$  (J2000)  
 $l: 347.38$   $b: 55.99$

DATE: 1980/193 - 1980/193  
 LIVETIME: 2044.3s  
 ROLL ANGLE:  $63.7^{\circ}$

NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:





FIELD CENTER:  $14^h 21^m 19.0^s$   $-45^\circ 56' 59''$  (B1950)  
 $14^h 24^m 33.2^s$   $-46^\circ 10' 33''$  (J2000)  
 $l: 319.29$   $b: 13.72$

DATE: 1979/240 - 1979/240  
 LIVETIME: 1145.6s  
 ROLL ANGLE:  $60.0^\circ$

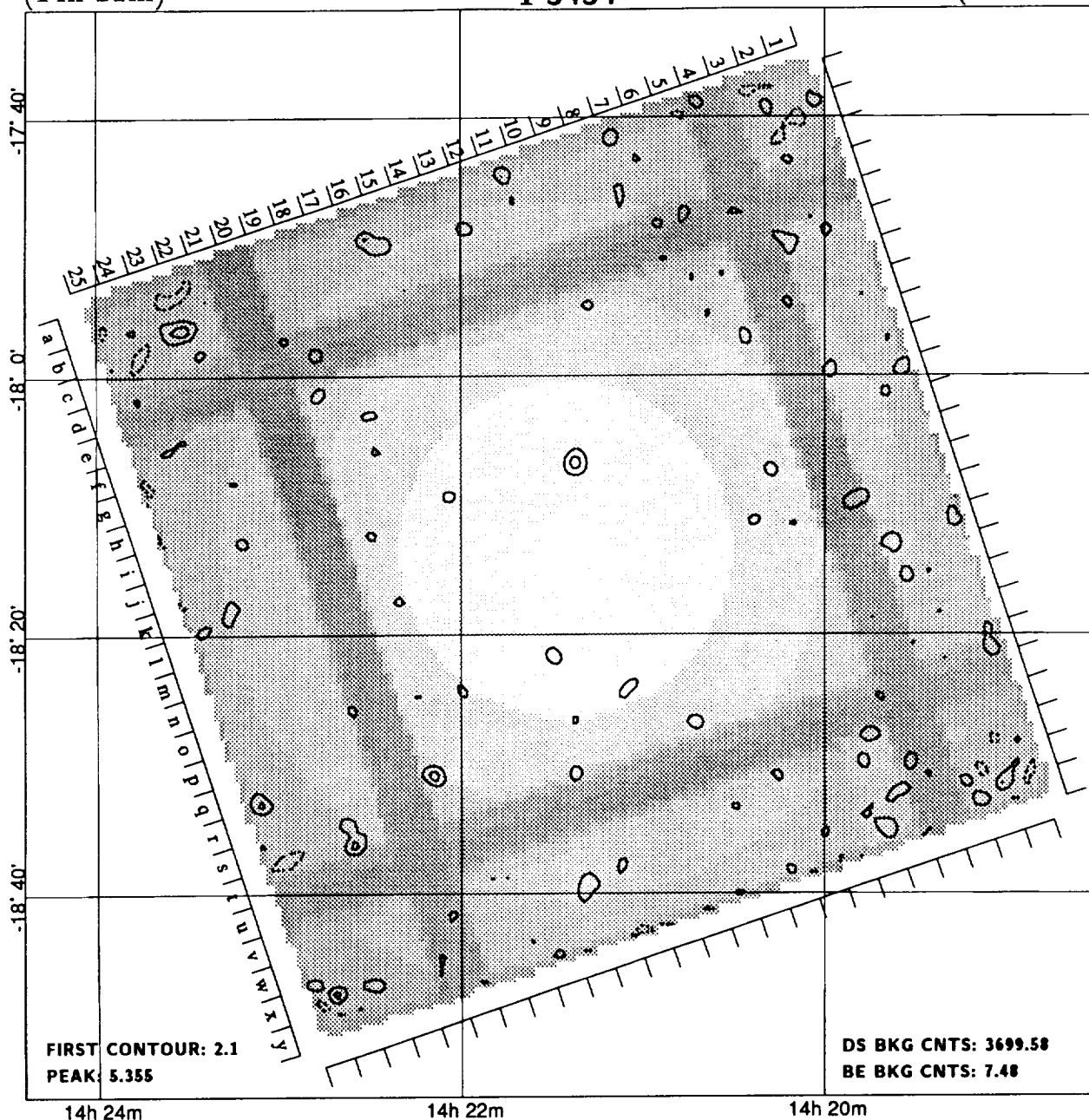
NH:  $1.4E+21$   
 REF/ID:  
 FIELD FLAGS:



(14h 21m)

I 3454

(14h 21m)



## 627, SOUTHERN CLUSTER AT HIGH REDSHIFT

FIELD CENTER:  $14^{\text{h}}21^{\text{m}}27.0^{\text{s}}$   $-18^{\circ}13'41''$  (B1950)  
 $14^{\text{h}}24^{\text{m}}13.7^{\text{s}}$   $-18^{\circ}27'15''$  (J2000)  
 $l$ : 331.74  $b$ : 39.17

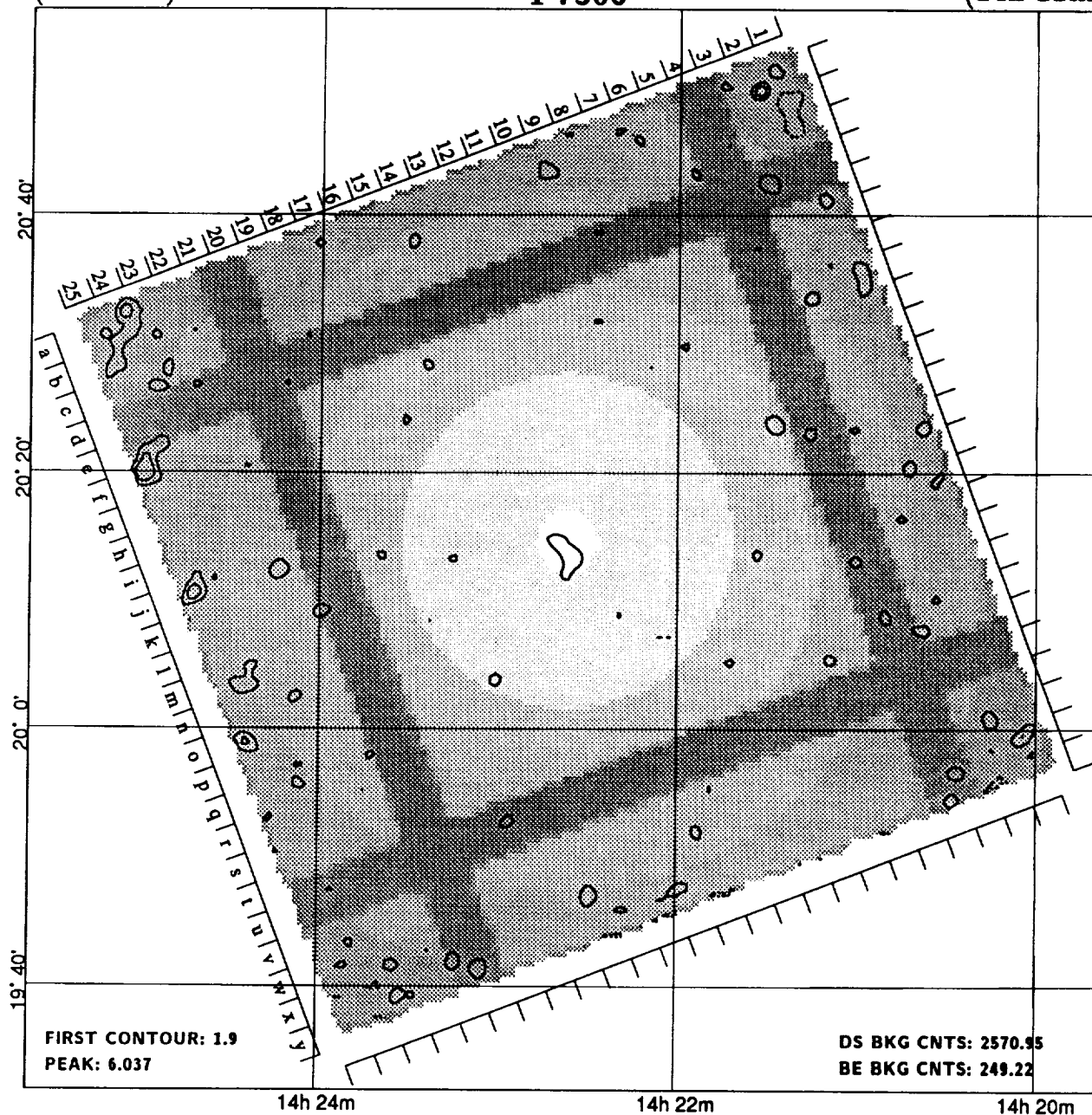
DATE: 1979/203 - 1979/203  
 LIVETIME: 2997.9s  
 ROLL ANGLE:  $71.7^{\circ}$

NH:  $7.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 22m)

I 7306

(14h 22m)



1422+20, LOW FREQ. VAR. EXTRAGAL. RADIO SOURCE

FIELD CENTER:  $14^{\text{h}}22^{\text{m}}37.6^{\text{s}}$   $20^{\circ}13'54''$  (B1950)  
 $14^{\text{h}}24^{\text{m}}57.0^{\text{s}}$   $20^{\circ}00'23''$  (J2000)  
 $l: 19.53$   $b: 67.46$

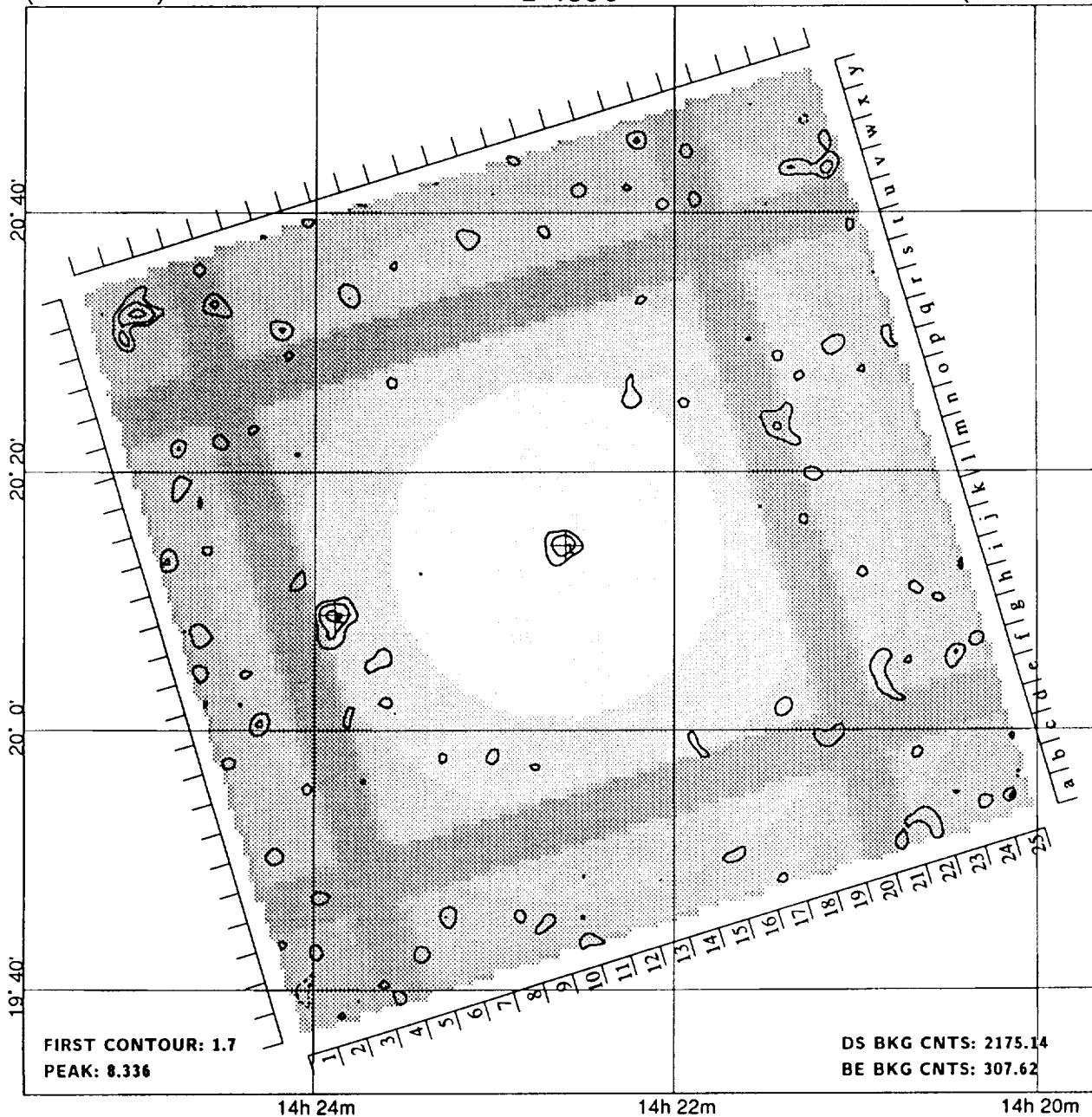
DATE: 1980/190 - 1980/190  
 LIVETIME: 2083.3s  
 ROLL ANGLE: 69.2°

NH: 2.6E+20  
 REF/ID:  
 FIELD FLAGS:

(14h 22m)

I 4396

(14h 22m)



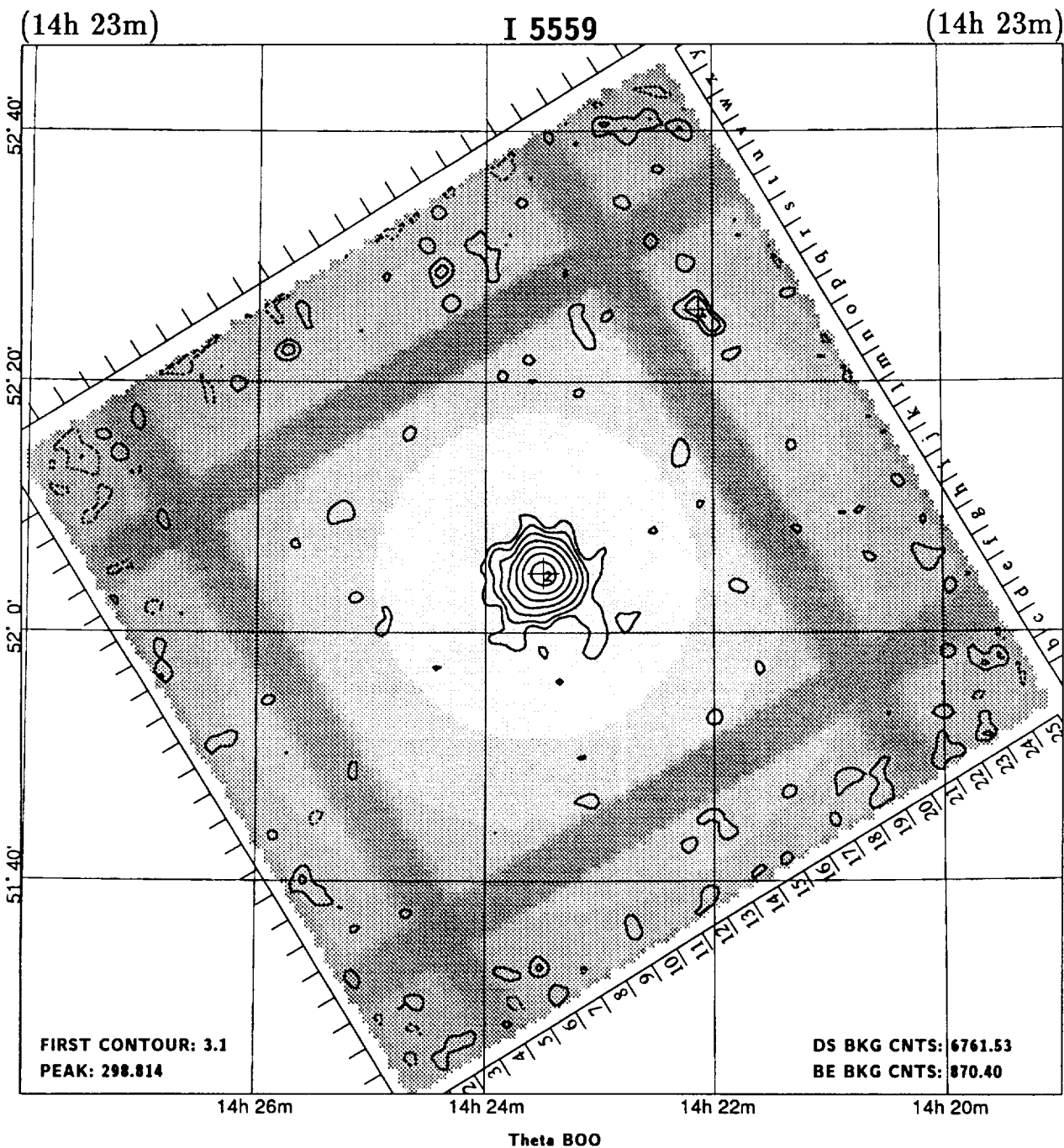
## QUASAR 1422+202

FIELD CENTER:  $14^{\text{h}}22^{\text{m}}37.6^{\text{s}}$   $20^{\circ}13'56''$  (B1950)  
 $14^{\text{h}}24^{\text{m}}57.0^{\text{s}}$   $20^{\circ}00'25''$  (J2000)  
 $l: 19.54$   $b: 67.46$

DATE: 1980/ 20 - 1980/ 20  
 LIVETIME: 1762.6s  
 ROLL ANGLE:  $-106.9^{\circ}$

NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3262	1	14 22 36.2	20 14 18	36	0.0187	0.0042	24.6	6.4	4.4	0.8	0	0.4	H	Q
3267	2	14 23 53.3	20 08 56	52	0.0215	0.0051	20.5	3.5	4.2	1.1	500	18.4		

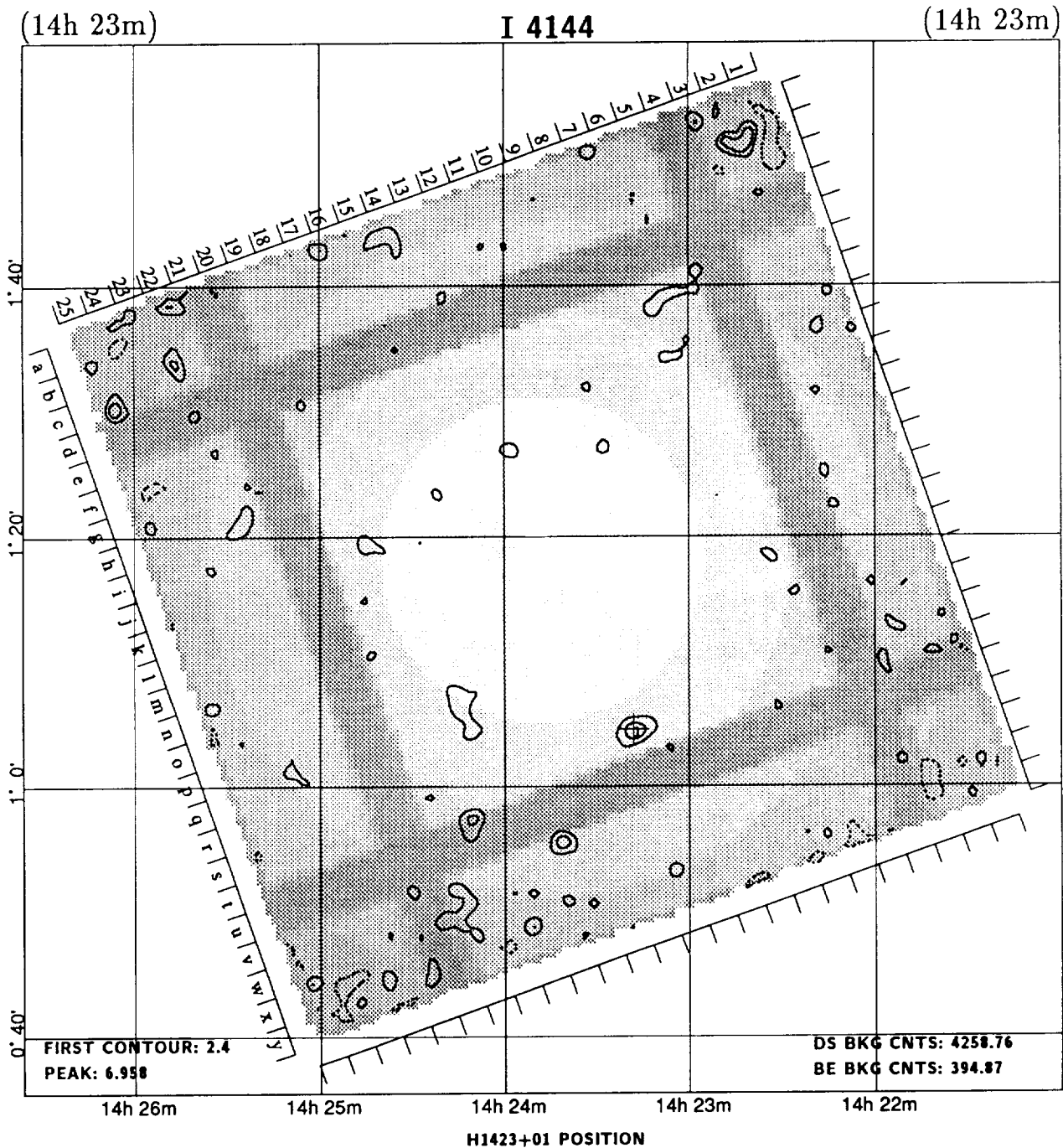


FIELD CENTER:  $14^h 23^m 30.0^s$   $52^\circ 04' 59''$  (B1950)  
 $14^h 25^m 13.4^s$   $51^\circ 51' 30''$  (J2000)  
 $l: 93.84$   $b: 59.64$

DATE: 1980/ 2 - 1980/ 3  
 LIVETIME: 5479.1s  
 ROLL ANGLE:  $-121.5^\circ$

NH:  $1.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3261	1	14 22 07.5	52 25 45	55	0.0084	0.0024	19.7	11.3	3.5	1.0	300	24.0	H	
3265	2	14 23 29.6	52 04 41	31	0.3368	0.0091	1375.5	19.5	36.8	1.7	0	0.2	H	S

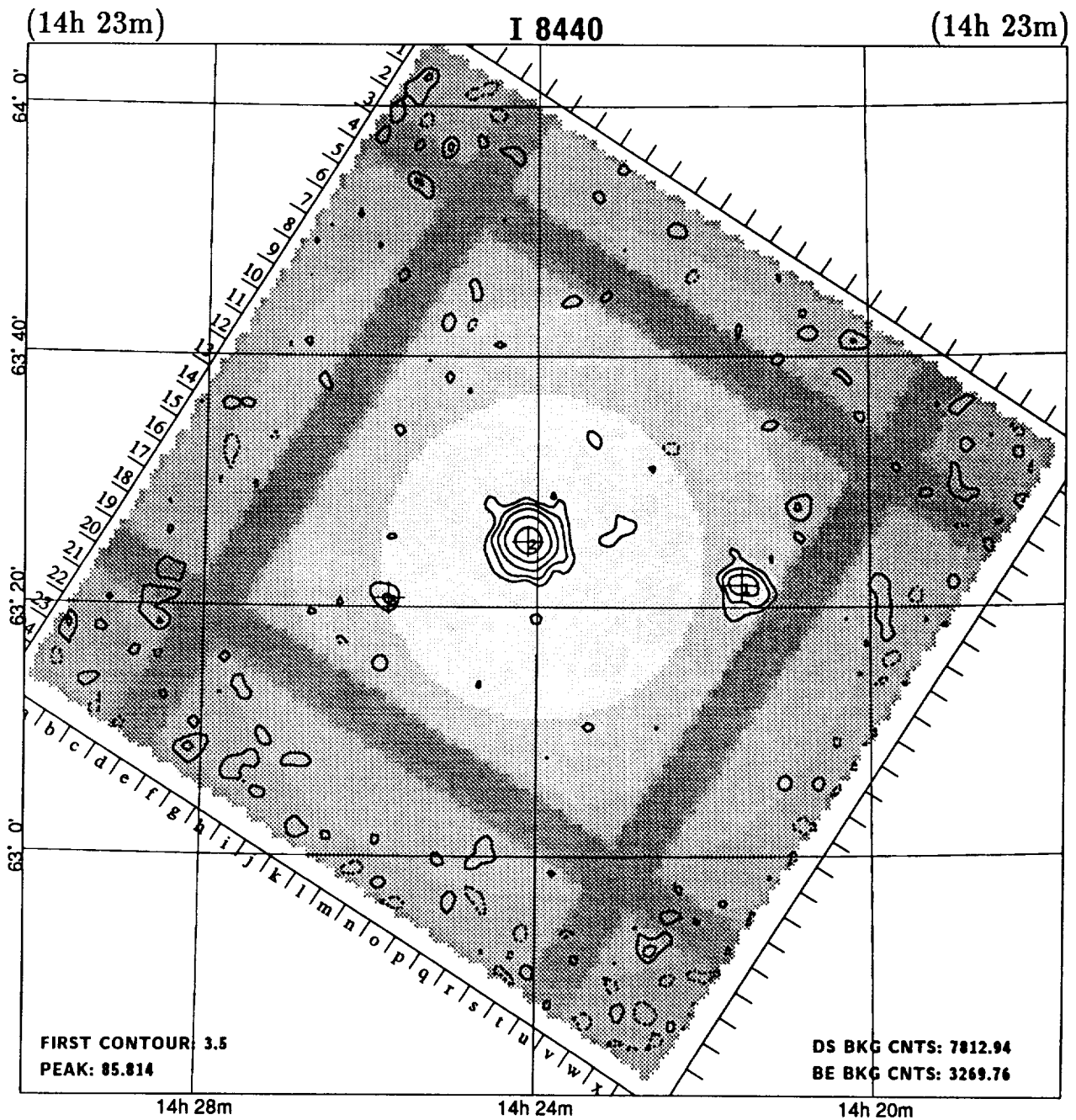


FIELD CENTER:  $14^{\text{h}}23^{\text{m}}48.0^{\text{s}}$   $01^{\circ}17'23''$  (B1950)  
 $14^{\text{h}}26^{\text{m}}20.9^{\text{s}}$   $01^{\circ}03'55''$  (J2000)  
 $l: 348.04$   $b: 55.40$

DATE: 1979/206 - 1979/211  
 LIVETIME: 3451.0s  
 ROLL ANGLE:  $70.7^{\circ}$

NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3264	1	14 23 18.1	01 04 30	46	0.0113	0.0028	22.7	9.3	4.0	0.8	100	14.8	H	



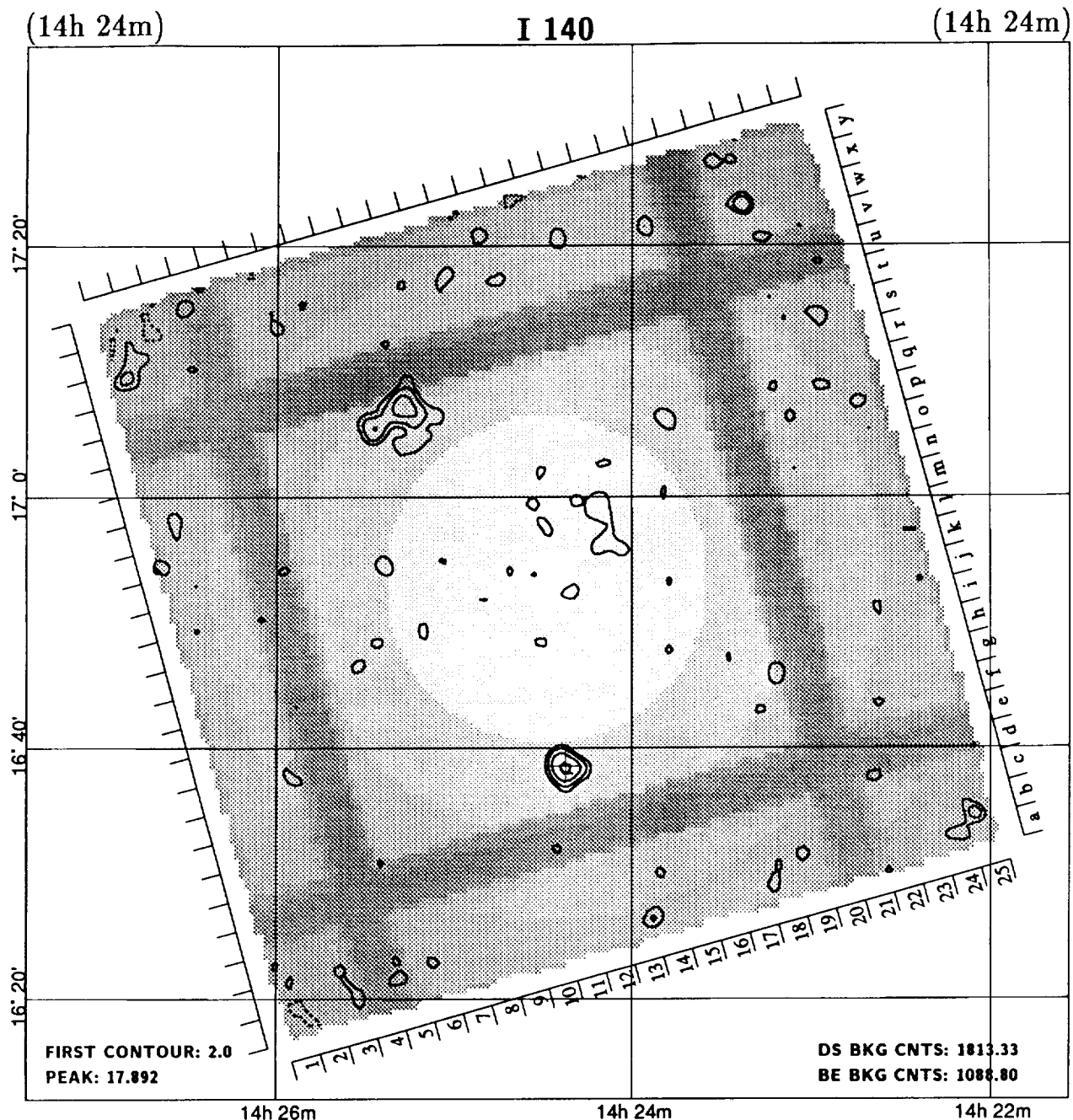
**A 1918, CD GALAXIES IN RICH CLUSTERS**

FIELD CENTER:  $14^h 23^m 54.0^s$   $63^\circ 22' 59''$  (B1950)  
 $14^h 25^m 09.5^s$   $63^\circ 09' 30''$  (J2000)  
 $l: 106.41$   $b: 50.86$

DATE: 1980/155 - 1980/155  
 LIVETIME: 6331.2s  
 ROLL ANGLE:  $32.6^\circ$

NH:  $1.7E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3259	1	14 21 32.2	63 21 43	49	0.0237	0.0029	85.6	24.4	8.2	1.3	0	15.9	H	
3268	2	14 24 07.0	63 25 15	31	0.0877	0.0045	409.7	29.3	19.6	1.8	0	2.7	H	
3276	3	14 25 47.3	63 20 42	45	0.0077	0.0019	30.6	23.4	4.2	0.6	0	13.1		



**A1913 CLUSTER SURFACE BRIGHTNESS**

FIELD CENTER:  $14^{\text{h}}24^{\text{m}}28.8^{\text{s}}$   $16^{\circ}53'59''$  (B1950)  
 $14^{\text{h}}26^{\text{m}}50.6^{\text{s}}$   $16^{\circ}40'33''$  (J2000)  
 $l: 12.52$   $b: 65.59$

DATE: 1979/ 30 - 1979/ 30  
 LIVETIME: 1469.4s  
 ROLL ANGLE:  $-105.4^{\circ}$

NH:  $1.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: LS

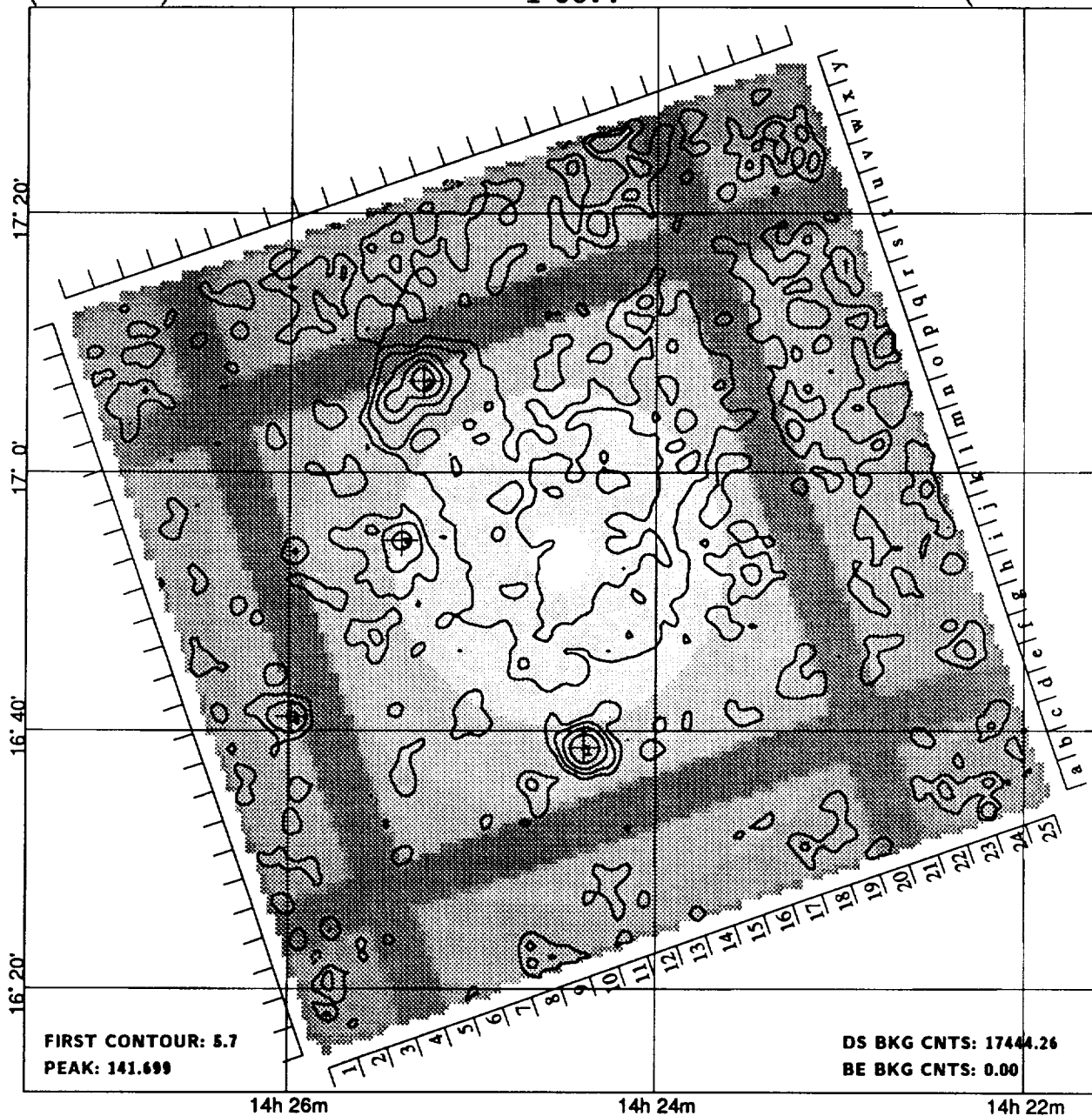
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3269	1L	14 24 22.3	16 38 33	50	0.064	0.010	55.7	4.3	6.3	1.0	0	15.4	A	S



(14h 24m)

I 6077

(14h 24m)



## A1913, DETAILED STUDY OF CLUSTER EXTENTS

FIELD CENTER:  $14^{\text{h}}24^{\text{m}}30.0^{\text{s}}$   $16^{\circ}53'59''$  (B1950)  
 $14^{\text{h}}26^{\text{m}}51.8^{\text{s}}$   $16^{\circ}40'33''$  (J2000)  
 $l: 12.53$   $b: 65.58$

DATE: 1980/ 22 - 1980/ 24  
 LIVETIME: 14135.7s  
 ROLL ANGLE:  $-109.1^{\circ}$

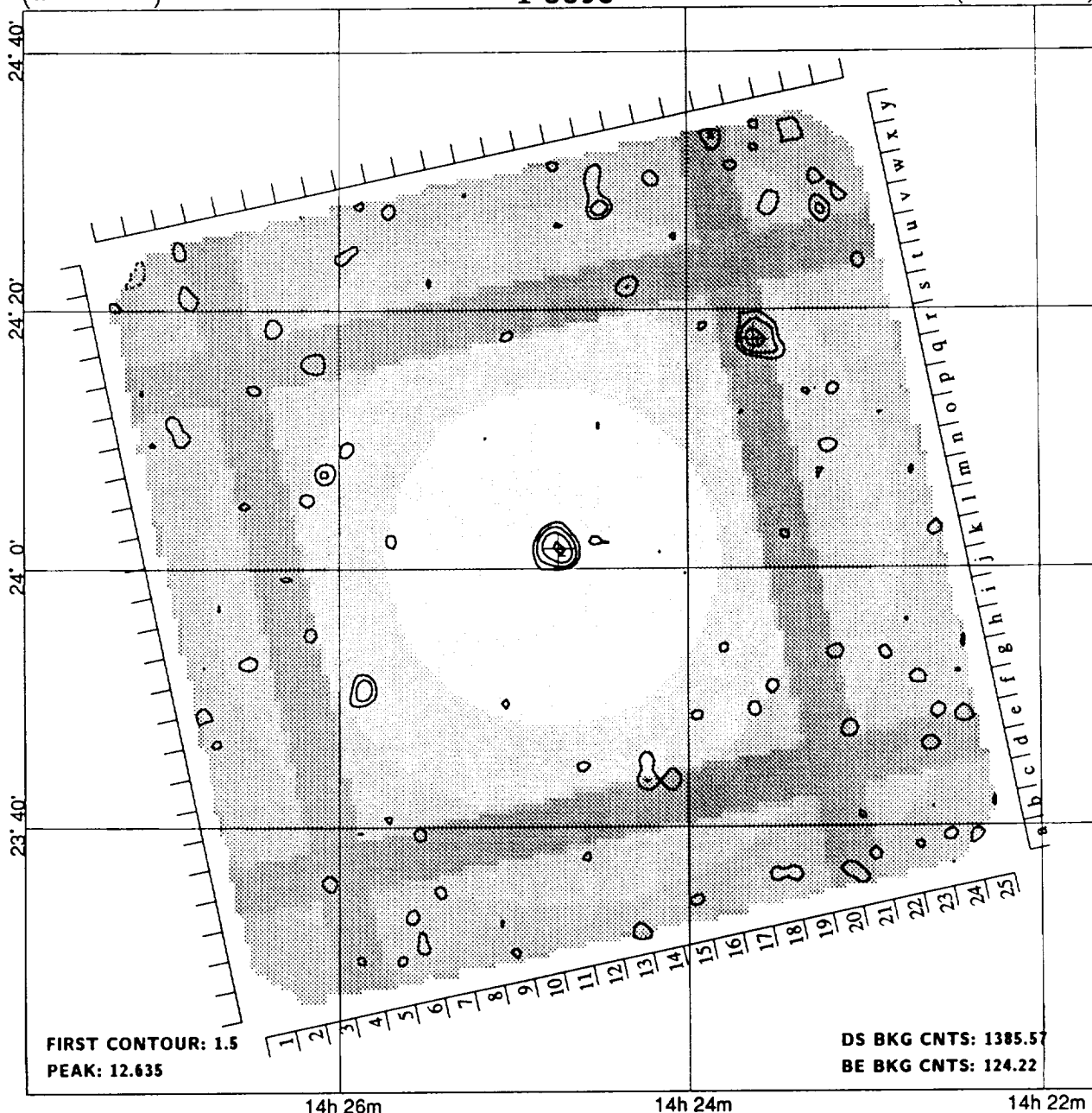
NH:  $1.6\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3269	1L	14 24 23.4	16 38 40	47	0.0324	0.0026	271.9	73.1	12.5	1.3	0	15.4	A	S
3272	2L	14 25 16.5	17 07 05	47	*0.0427	0.0038	334.0	135.3	11.1	8.4	702	17.2		
3274	3L	14 25 23.4	16 54 44	41	0.0080	0.0016	71.9	71.1	4.8	2.4	0	12.9		
3277	4L	14 25 59.1	16 41 05	55	*0.0104	0.0027	64.9	41.3	3.7	1.2	804	24.9		

(14h 24m)

I 3898

(14h 24m)



## 1424+240, BL-LAC OBJECT

FIELD CENTER:  $14^{\text{h}}24^{\text{m}}44.2^{\text{s}}$   $24^{\circ}01'25''$  (B1950)  
 $14^{\text{h}}27^{\text{m}}00.3^{\text{s}}$   $23^{\circ}48'00''$  (J2000)  
 $l: 29.49$   $b: 68.21$

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 1122.8s  
 ROLL ANGLE:  $-102.0^{\circ}$

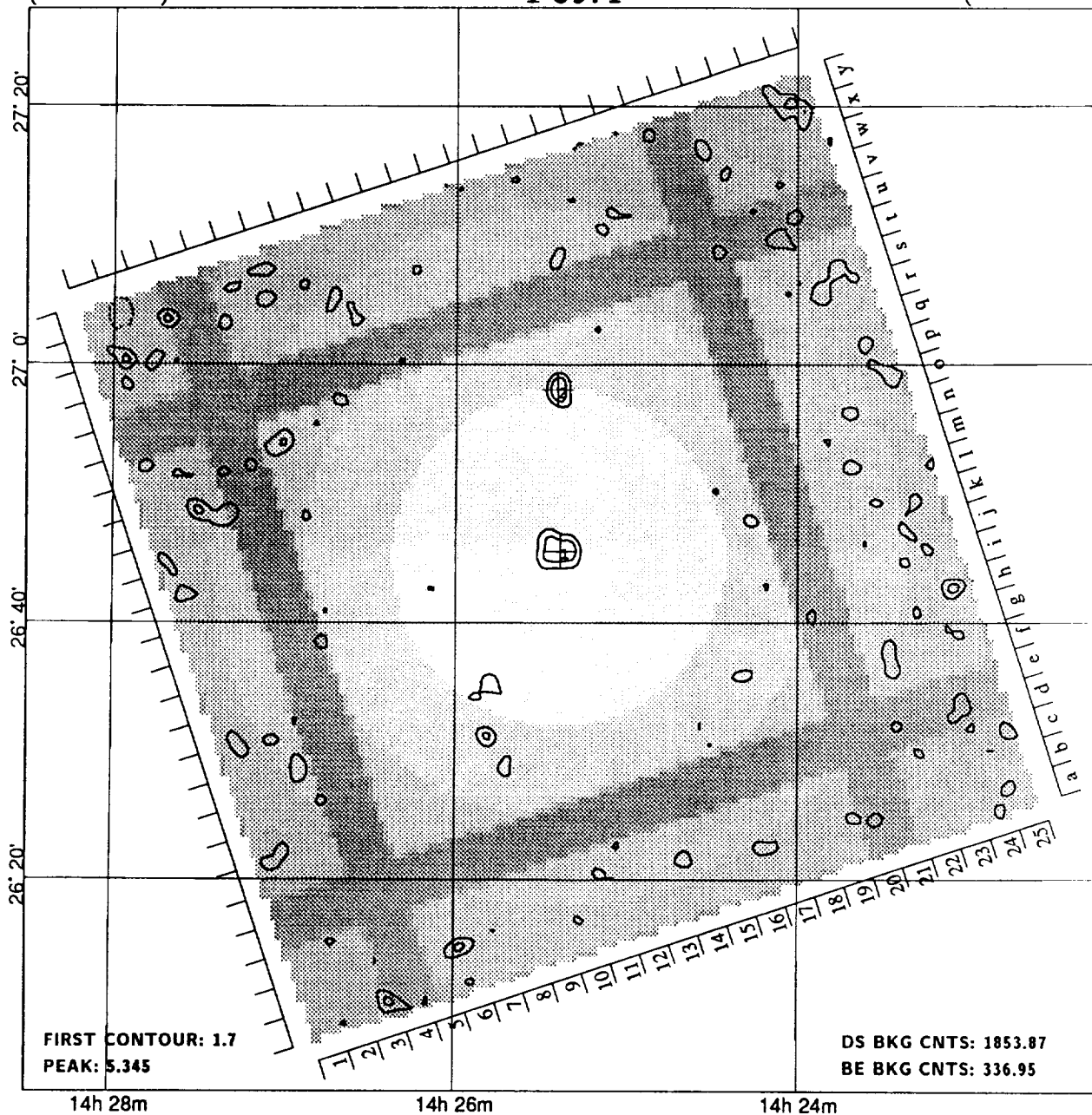
NH:  $2.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3266	1	14 23 37.2	24 17 42	52	*0.0375	0.0088	19.5	1.5	4.2	1.1	1209	22.5	H	
3271	2	14 24 44.7	24 01 34	35	0.0672	0.0093	56.2	3.8	7.3	1.0	0	0.6	H	BL

(14h 25m)

I 3971

(14h 25m)



## 1425+267, BRIGHT NEARBY QUASAR

FIELD CENTER:  $14^h 25^m 21.9^s$   $26^\circ 45' 38''$  (B1950)  
 $14^h 27^m 35.6^s$   $26^\circ 32' 14''$  (J2000)  
 $l: 36.87$   $b: 68.57$

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 1502.2s  
 ROLL ANGLE:  $-108.3^\circ$

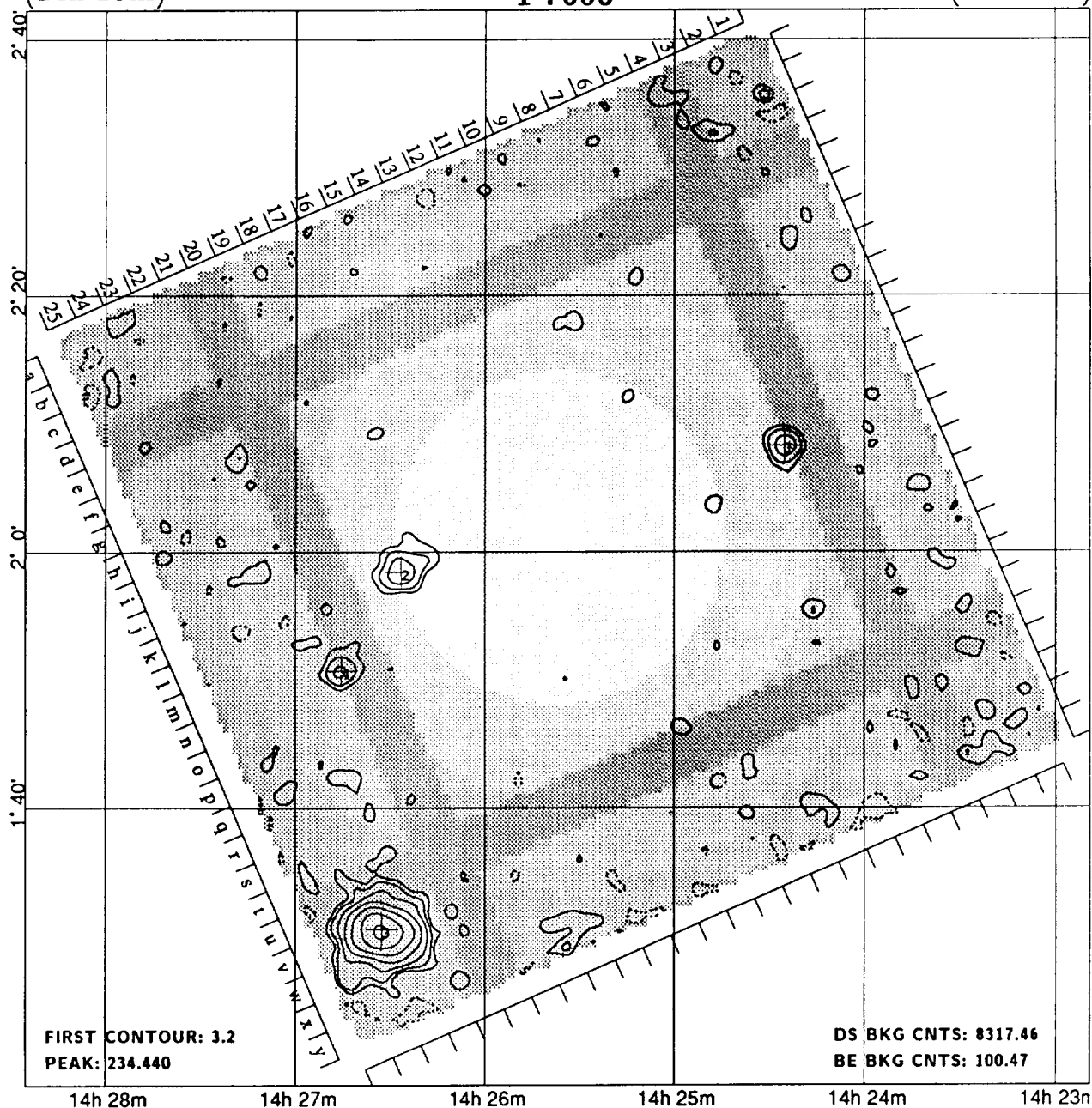
NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3273	1	14 25 23.2	26 45 36	36	0.0265	0.0053	29.6	5.4	5.0	1.0	0	0.2	H	Q
3275	2	14 25 24.4	26 58 03	46	0.0176	0.0049	16.5	4.5	3.6	0.7	0	12.7		

(14h 25m)

I 7608

(14h 25m)



## EMPTY FIELD IN VIRGO (MISPOINT)

FIELD CENTER:  $14^h 25^m 37.3^s$   $02^\circ 00' 17''$  (B1950) $14^h 28^m 09.7^s$   $01^\circ 46' 54''$  (J2000) $l: 349.46$   $b: 55.66$ 

DATE: 1980/193 - 1980/193

LIVETIME: 6739.9s

ROLL ANGLE:  $66.6^\circ$ NH:  $2.7E+20$ 

REF/ID:

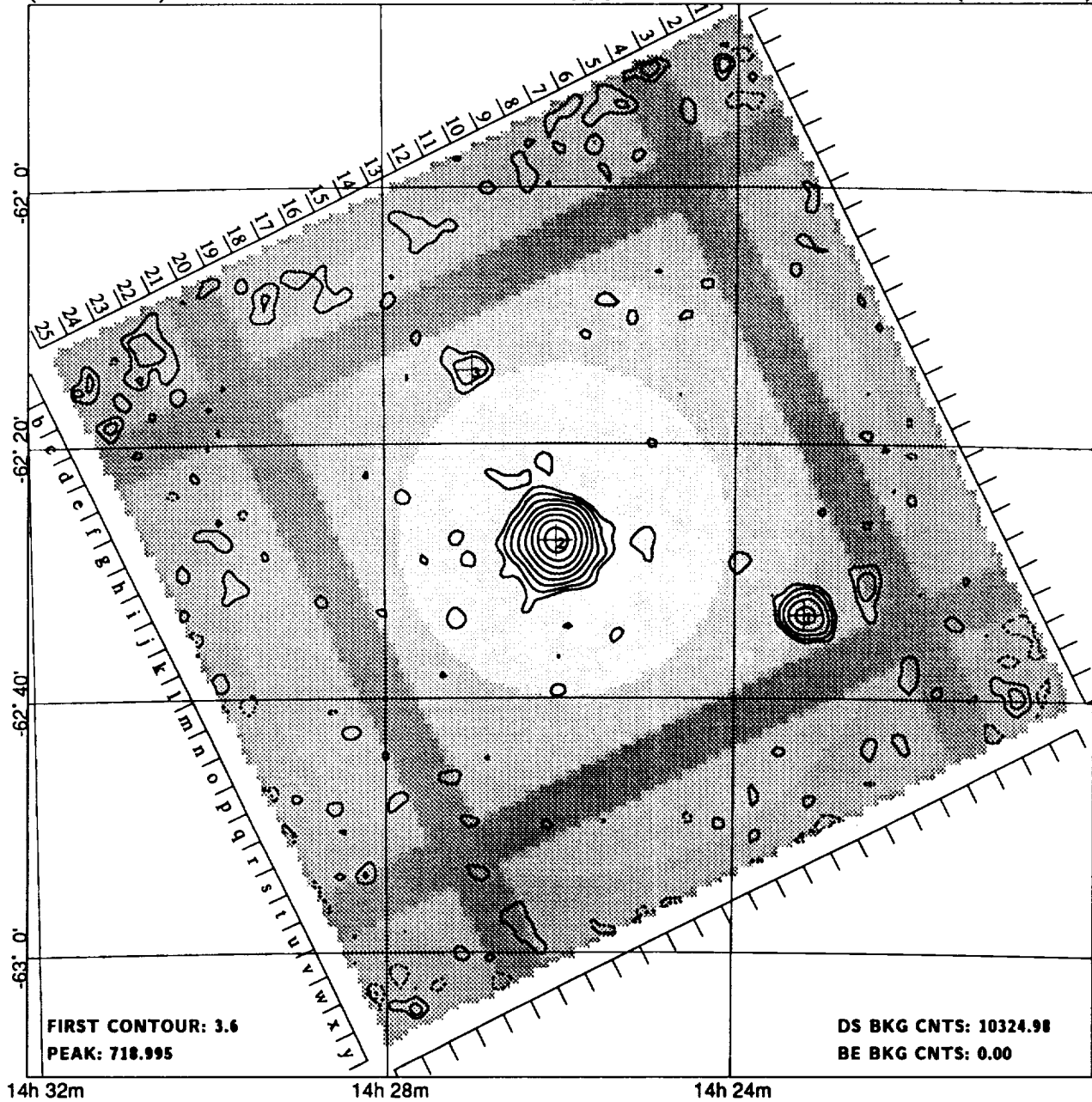
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3270	1	14 24 25.1	02 08 16	50	*0.0135	0.0022	47.8	11.2	6.2	0.9	703	19.5	H	
3279	2	14 26 26.7	01 58 25	41	0.0182	0.0023	76.9	17.1	7.9	1.3	0	12.5	AH	
3280	3	14 26 32.7	01 30 32	47	*0.218	0.011	428.4	8.6	20.5	1.8	501	32.9	AH	Q
3281	4	14 26 45.6	01 50 39	51	*0.0114	0.0020	39.2	9.8	5.6	1.0	907	19.5	H	

(14h 25m)

I 7689

(14h 25m)



## PROX CEN, COORDINATED STUDY OF THE DME FLARE STARS

**FIELD CENTER:**  $14^{\text{h}}25^{\text{m}}59.0^{\text{s}}$   $-62^{\circ}27'40''$  (B1950)  
 $14^{\text{h}}29^{\text{m}}50.2^{\text{s}}$   $-62^{\circ}41'01''$  (J2000)  
 $l: 313.95$   $b: -1.94$

**DATE:** 1980/233 - 1980/233  
**LIVETIME:** 8366.6s  
**ROLL ANGLE:**  $63.7^{\circ}$

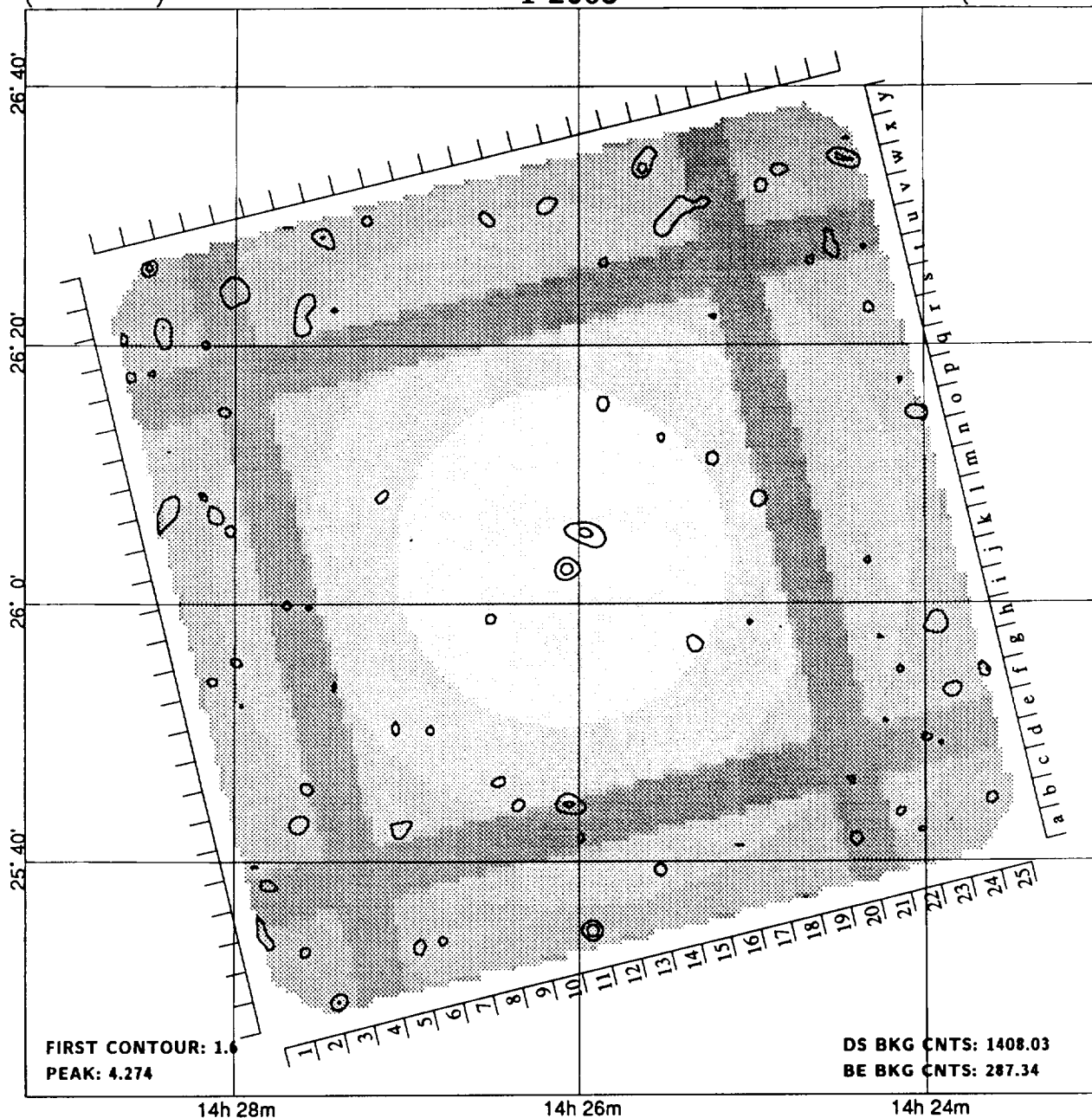
**NH:**  $1.2\text{E}+21$   
**REF/ID:**  
**FIELD FLAGS:** L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3263	1L	14 23 12.4	-62 33 20	47	0.0495	0.0042	210.8	37.2	11.6	1.1	0	20.1	A	S
3278	2L	14 26 02.4	-62 27 32	31	0.436	0.010	2713.8	522.2	41.5	1.4	0	0.4	A	S
3283	3L	14 26 59.9	-62 14 14	51	0.0083	0.0020	41.4	25.6	4.1	1.1	0	15.2	A	S

(14h 26m)

I 2605

(14h 26m)



## AWM 3: CD GALAXIES IN POOR CLUSTERS

FIELD CENTER:  $14^{\text{h}}26^{\text{m}}06.0^{\text{s}}$   $26^{\circ}03'59''$  (B1950)  
 $14^{\text{h}}28^{\text{m}}20.3^{\text{s}}$   $25^{\circ}50'37''$  (J2000)  
 $l$ : 35.06  $b$ : 68.31

DATE: 1980/ 25 - 1980/ 25  
 LIVETIME: 1141.0s  
 ROLL ANGLE:  $-103.6^{\circ}$

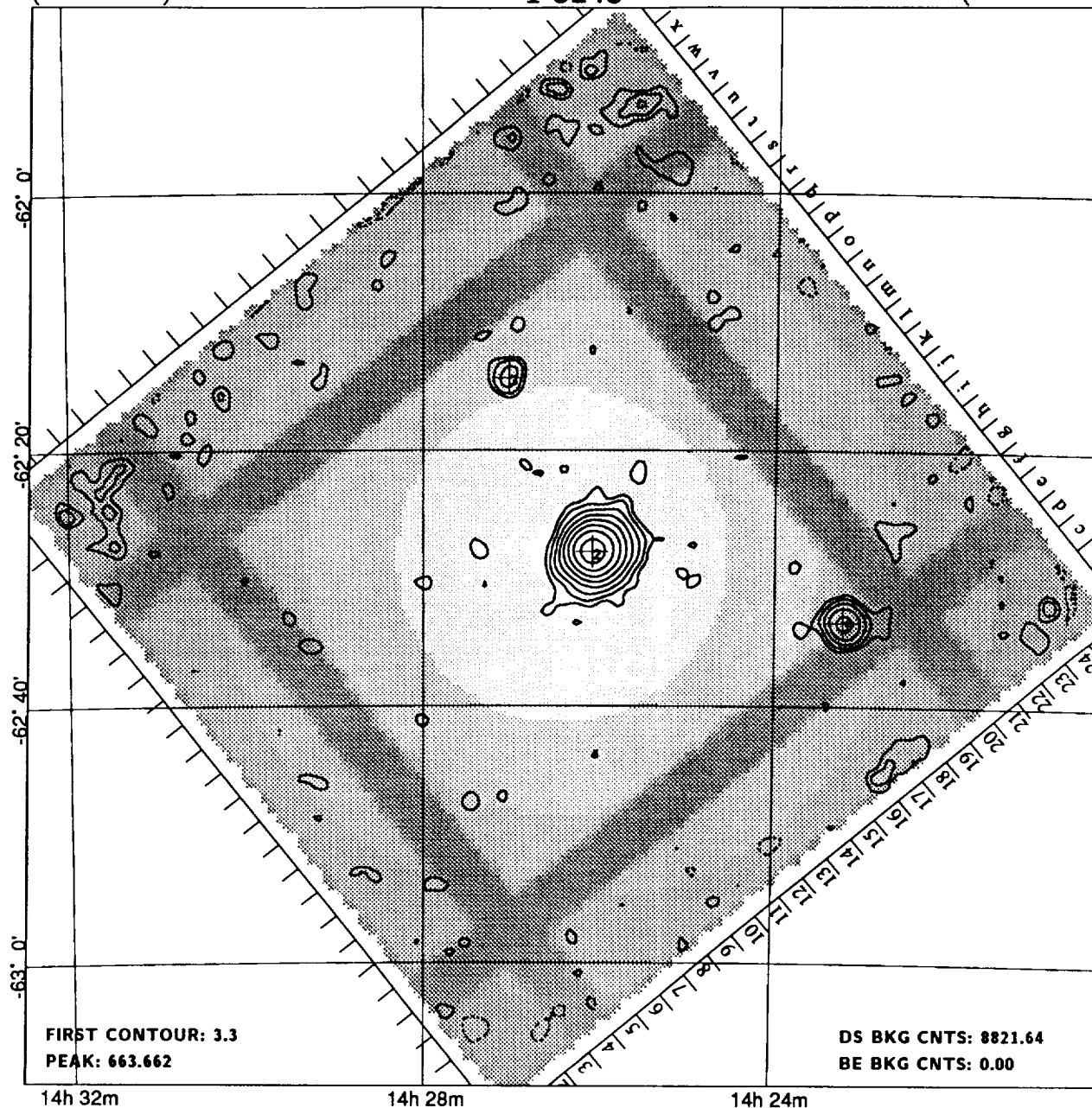
NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



(14h 26m)

I 3243

(14h 26m)



FLARE STARS: PROXIMA CEN

FIELD CENTER:  $14^h 26^m 24.0^s$   $-62^\circ 27' 35''$  (B1950)

DATE: 1979/ 65 - 1979/ 66

NH: 1.2E+21

 $14^h 30^m 15.4^s$   $-62^\circ 40' 55''$  (J2000)

LIVETIME: 7148.5s

REF/ID:

 $l$ : 314.00  $b$ : -1.95ROLL ANGLE:  $-129.2^\circ$ 

FIELD FLAGS: L

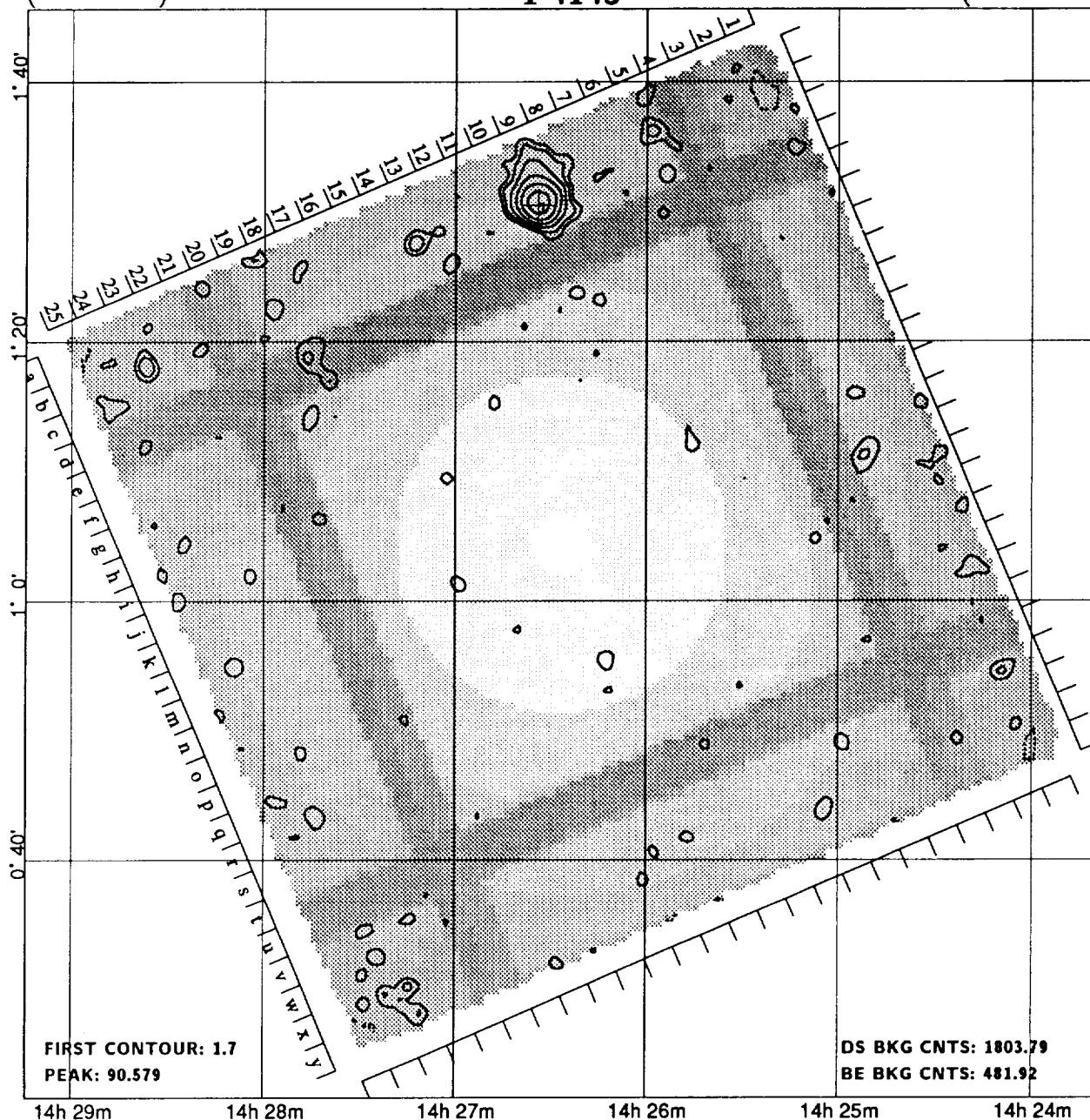
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3263	1L	14 23 13.5	-62 33 20	47	*0.0578	0.0067	193.4	19.0	8.5	1.1	904	22.7	A	S
3278	2L	14 26 04.6	-62 27 53	31	0.476	0.012	2502.0	484.0	39.8	1.5	0	2.2	A	S
3283	3L	14 27 01.7	-62 14 23	41	0.0160	0.0024	68.5	13.5	6.5	0.8	0	14.0	A	S



(14h 26m)

I 4143

(14h 26m)



FIELD CENTER:  $14^h 26^m 26.4^s$   $01^\circ 03' 35''$  (B1950)  
 $14^h 28^m 59.5^s$   $00^\circ 50' 14''$  (J2000)  
 $l: 348.68$   $b: 54.80$

DATE: 1980/193 - 1980/193  
 LIVETIME: 1461.7s  
 ROLL ANGLE:  $67.0^\circ$

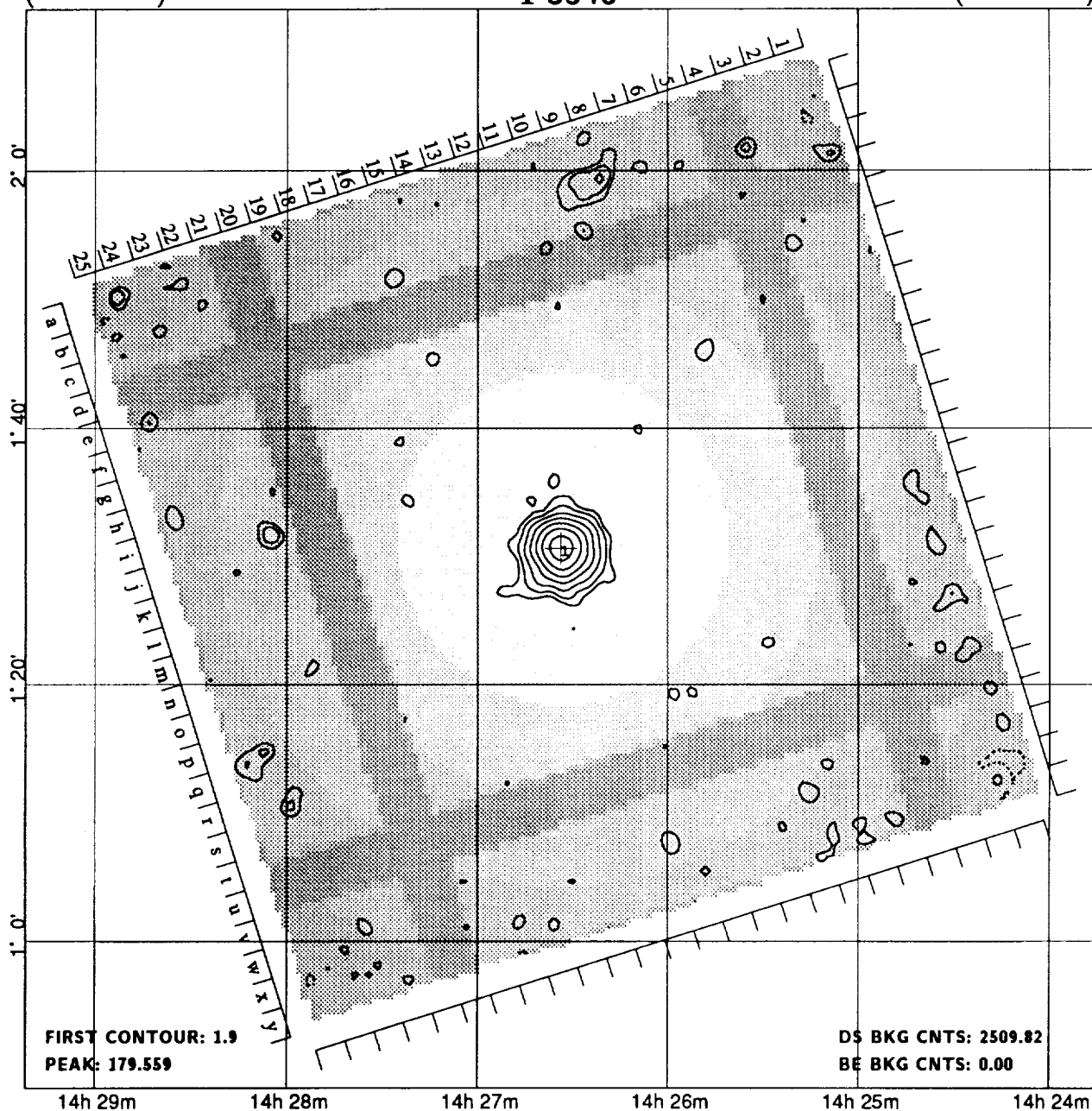
NH:  $2.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3280	1	14 26 34.1	01 30 26	47	0.331	0.024	198.8	4.2	13.9	1.3	0	27.1	AH	Q

(14h 26m)

I 5348

(14h 26m)



## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $14^{\text{h}}26^{\text{m}}33.8^{\text{s}}$   $01^{\circ}30'36''$  (B1950)  
 $14^{\text{h}}29^{\text{m}}06.6^{\text{s}}$   $01^{\circ}17'16''$  (J2000)  
 $l: 349.22$   $b: 55.13$

DATE: 1980/216 - 1980/216  
 LIVETIME: 2033.8s  
 ROLL ANGLE:  $72.6^{\circ}$

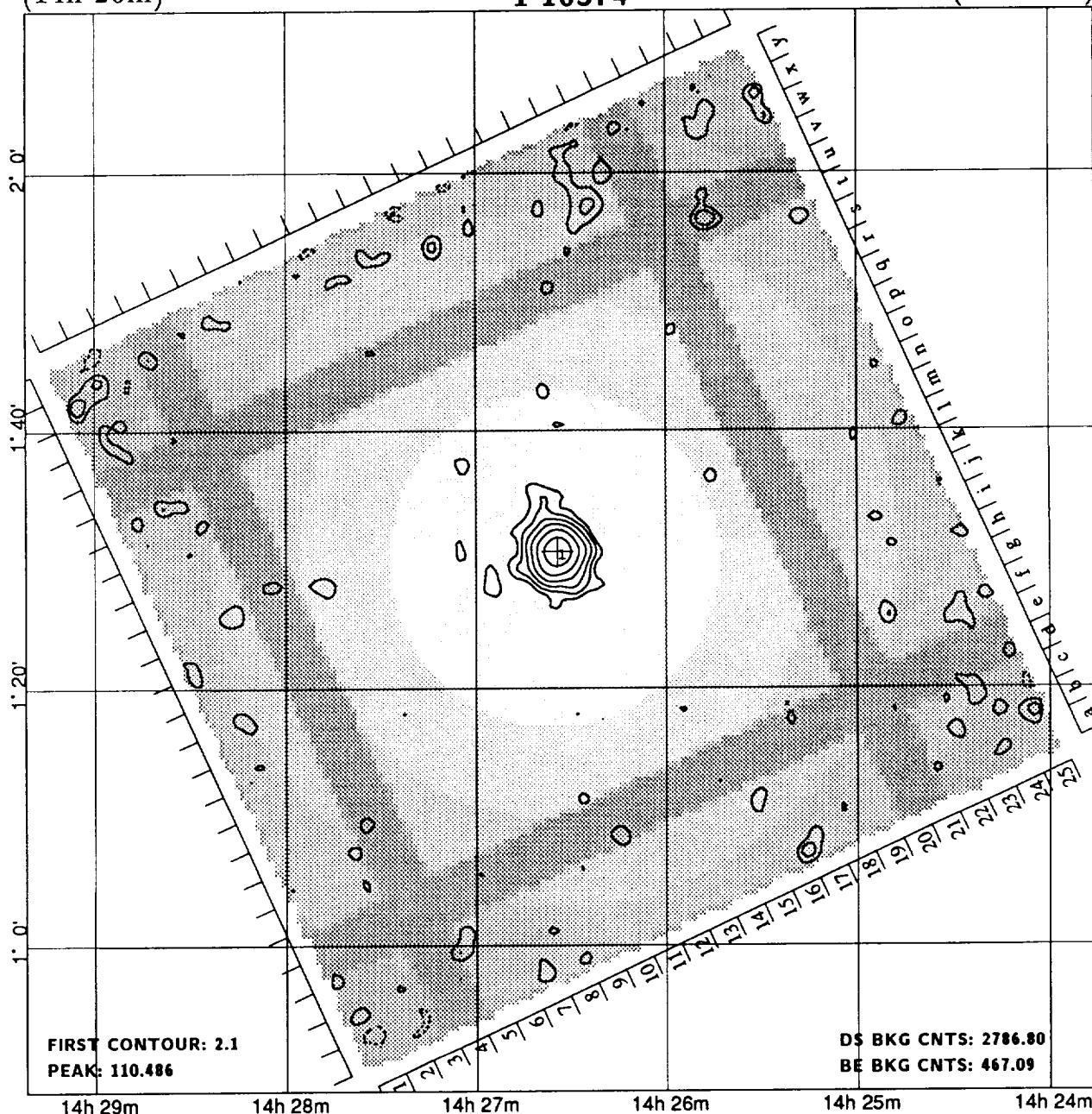
NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3280	1L	14 26 33.7	01 30 37	31	0.441	0.022	667.1	144.9	20.2	1.5	0	0.1	A	Q

(14h 26m)

I 10374

(14h 26m)



FIELD CENTER:  $14^h 26^m 33.8^s$   $01^\circ 30' 36''$  (B1950)  
 $14^h 29^m 06.6^s$   $01^\circ 17' 16''$  (J2000)  
 $l: 349.22$   $b: 55.13$

DATE: 1981/ 4 - 1981/ 4  
 LIVETIME: 2258.3s  
 ROLL ANGLE:  $-114.7^\circ$

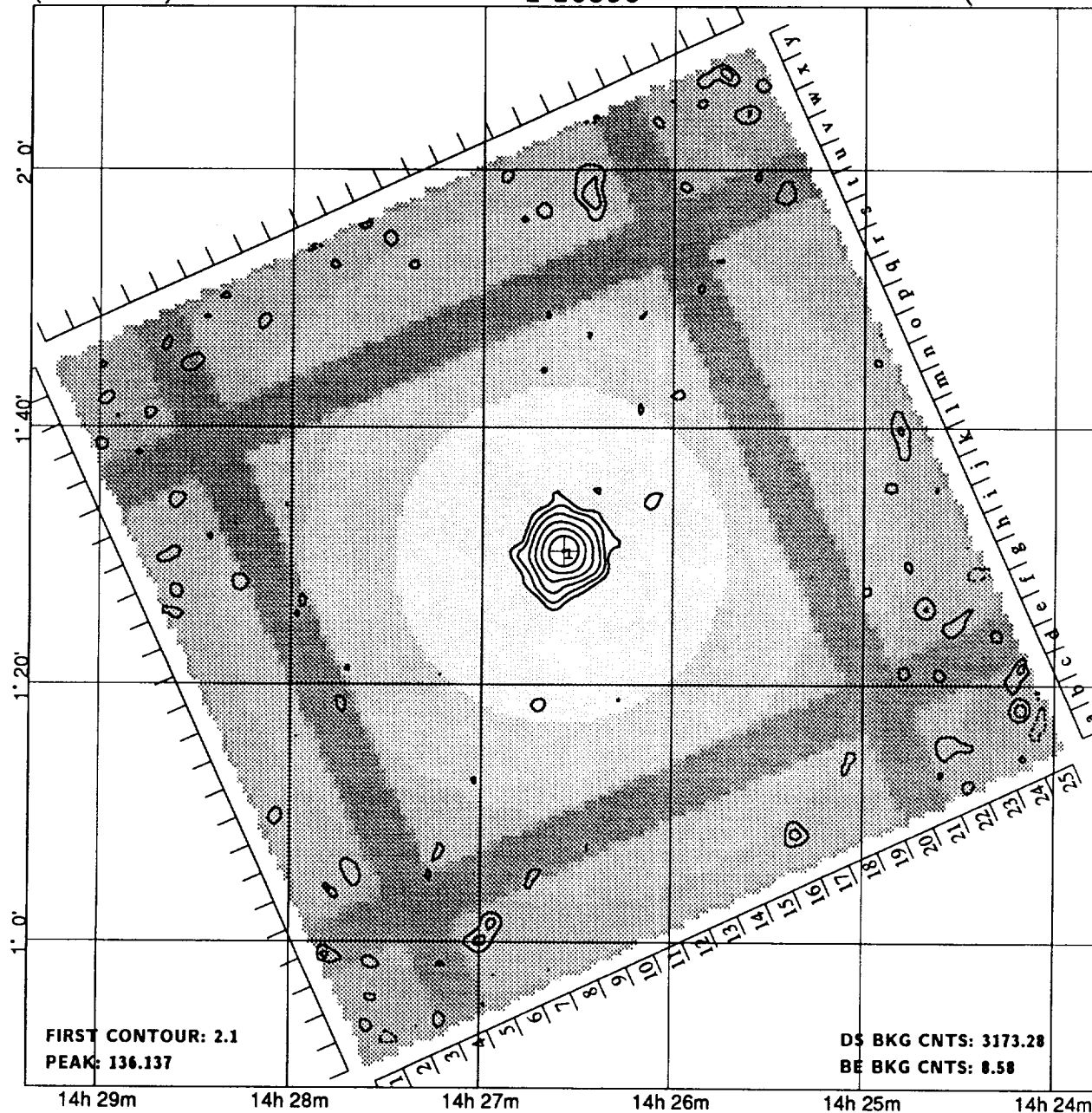
NH:  $2.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3280	1	14 26 34.2	01 30 34	31	0.303	0.014	508.8	8.2	22.4	1.5	0	0.2	AH	Q

(14h 26m)

I 10390

(14h 26m)



PG 1426+01, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^{\text{h}}26^{\text{m}}33.8^{\text{s}}$   $01^{\circ}30'36''$  (B1950)  
 $14^{\text{h}}29^{\text{m}}06.6^{\text{s}}$   $01^{\circ}17'16''$  (J2000)  
 $l: 349.22$   $b: 55.13$

DATE: 1981/ 5 - 1981/ 5

NH:  $2.0\text{E}+20$ 

LIVETIME: 2571.4s

REF/ID:

ROLL ANGLE:  $-114.5^{\circ}$ 

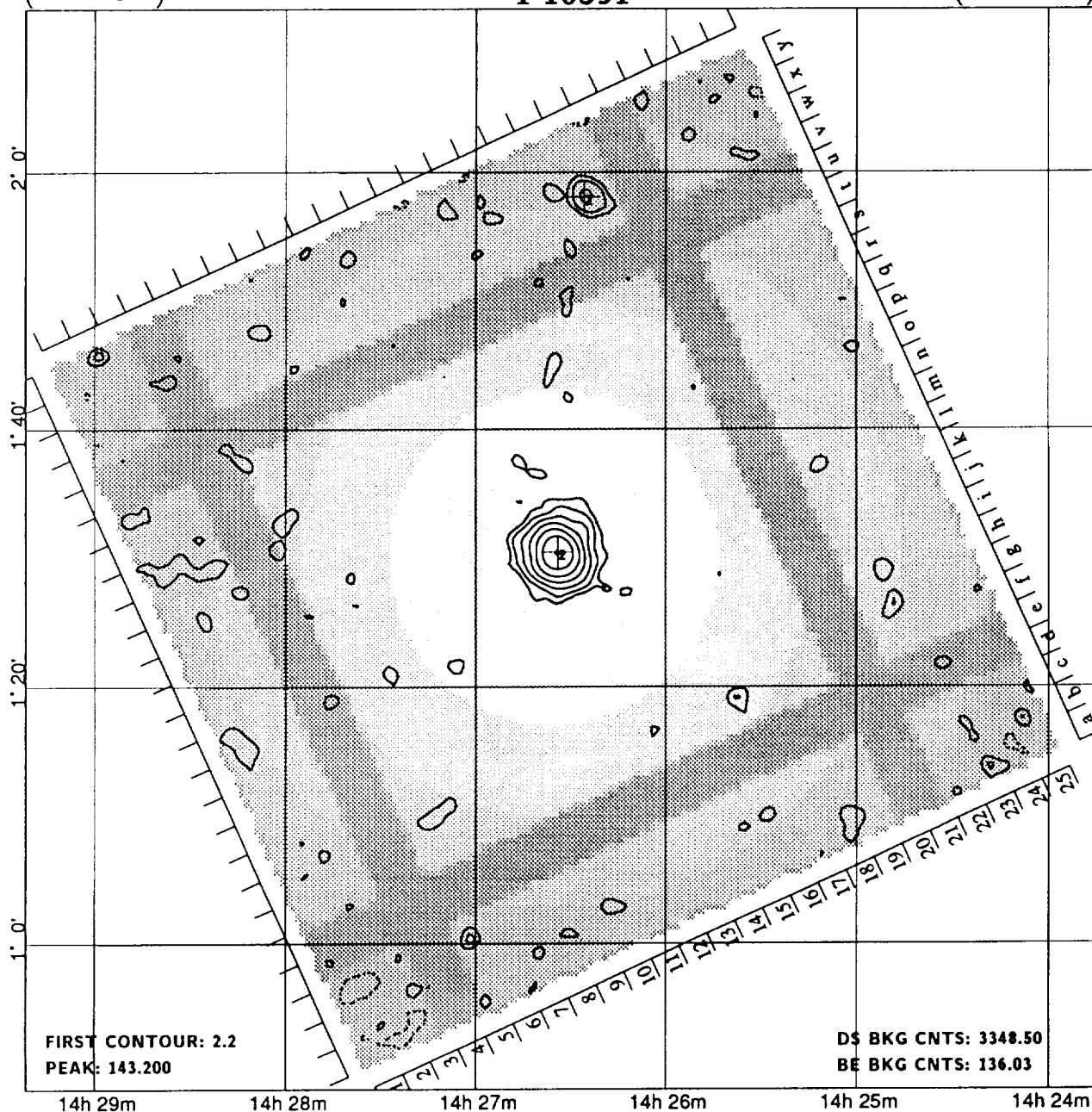
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3280	1	14 26 34.2	01 30 25	31	0.317	0.013	607.2	7.8	24.5	1.6	0	0.4	AH	Q

(14h 26m)

I 10391

(14h 26m)



FIELD CENTER:  $14^h 26^m 33.8^s$   $01^\circ 30' 36''$  (B1950)  
 $14^h 29^m 06.6^s$   $01^\circ 17' 16''$  (J2000)  
 $l: 349.22$   $b: 55.13$

DATE: 1981/ 5 - 1981/ 5  
 LIVETIME: 2713.4s  
 ROLL ANGLE:  $-114.5^\circ$

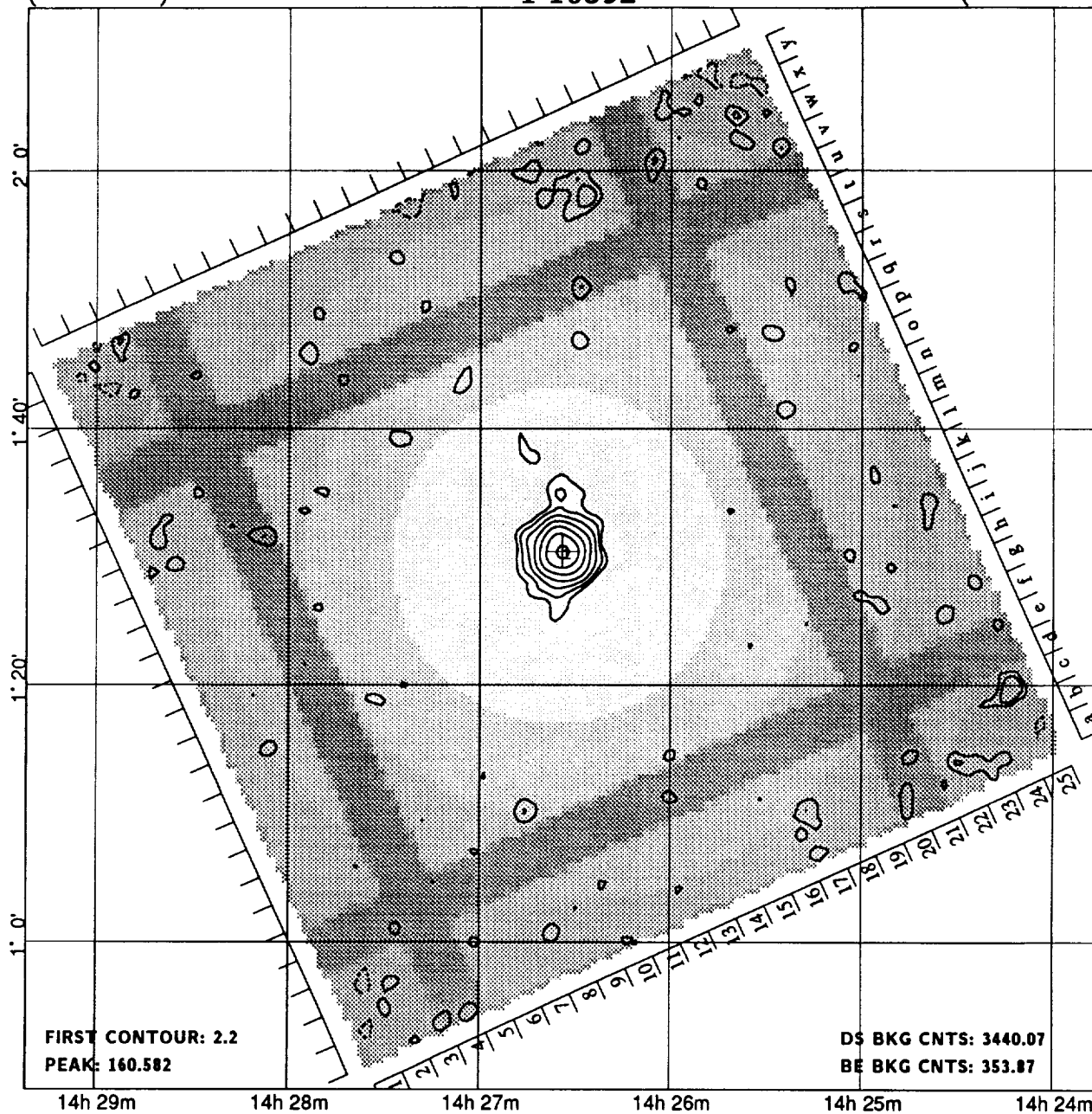
NH:  $2.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3279	1	14 26 25.8	01 58 04	55	0.0206	0.0051	21.1	5.9	4.1	1.2	0	27.9	AH	
3280	2	14 26 34.1	01 30 30	31	0.325	0.013	656.5	8.5	25.5	1.5	0	0.2	AH	Q

(14h 26m)

I 10392

(14h 26m)



PG 1426+01, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^h 26^m 33.8^s$   $01^\circ 30' 36''$  (B1950)  
 $14^h 29^m 06.6^s$   $01^\circ 17' 16''$  (J2000)  
 $l: 349.22$   $b: 55.13$

DATE: 1981/ 5 - 1981/ 5  
 LIVETIME: 2787.6s  
 ROLL ANGLE:  $-114.5^\circ$

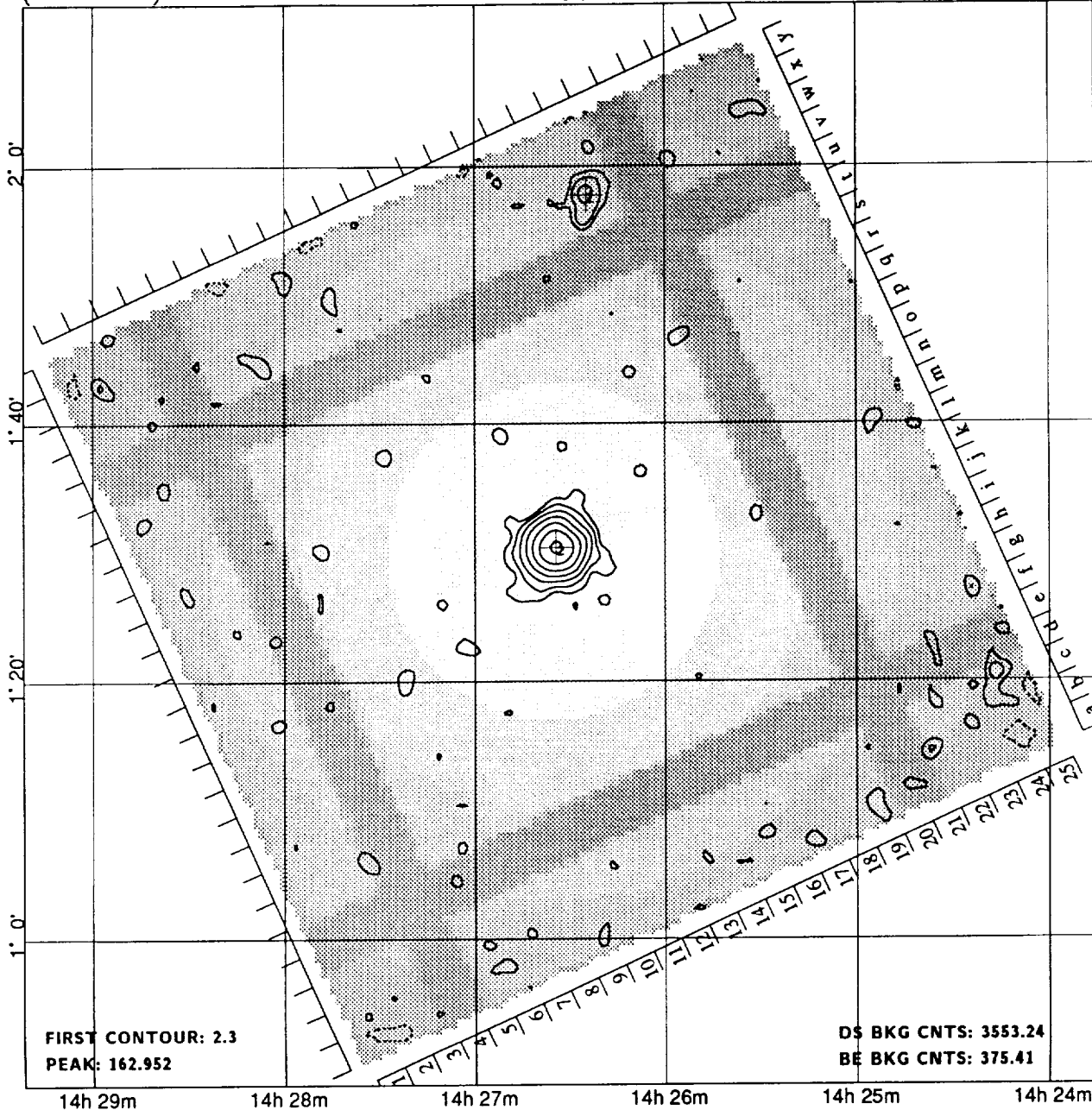
NH:  $2.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3280	1	14 26 34.1	01 30 26	31	0.330	0.013	684.4	9.6	26.0	1.5	0	0.2	AH	Q

(14h 26m)

I 10393

(14h 26m)



PG 1426+01, SEARCH FOR VARIABILITY IN HIGH COUNT RATE QSOS

FIELD CENTER:  $14^h 26^m 33.8^s$   $01^\circ 30' 36''$  (B1950)  
 $14^h 29^m 06.6^s$   $01^\circ 17' 16''$  (J2000)  
 $l: 349.22$   $b: 55.13$

DATE: 1981/ 5 - 1981/ 5  
 LIVETIME: 2879.3s  
 ROLL ANGLE:  $-114.4^\circ$

NH:  $2.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

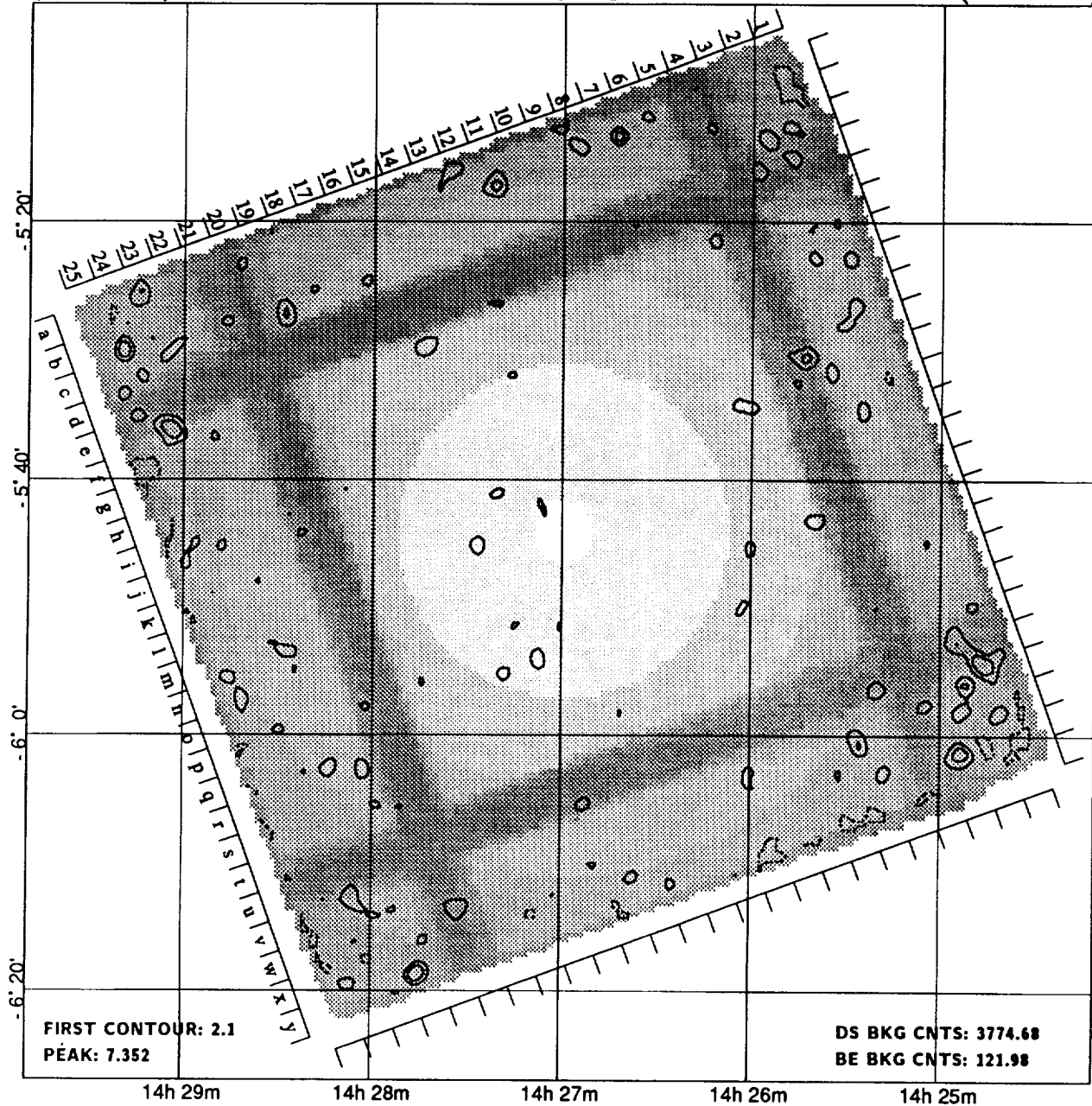
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3279	1	14 26 24.7	01 57 42	53	0.0194	0.0048	21.4	6.6	4.1	1.2	0	27.4	AH	
3280	2	14 26 34.3	01 30 20	31	0.338	0.013	724.5	9.5	26.7	1.5	0	0.4	AH	Q



(14h 27m)

I 6473

(14h 27m)



## NGC 5634, GLOBULAR CLUSTER SURVEY

FIELD CENTER:  $14^{\text{h}} 27^{\text{m}} 00.0^{\text{s}}$   $-05^{\circ} 44' 59''$  (B1950)  
 $14^{\text{h}} 29^{\text{m}} 37.9^{\text{s}}$   $-05^{\circ} 58' 19''$  (J2000)  
 $l: 342.22$   $b: 49.26$

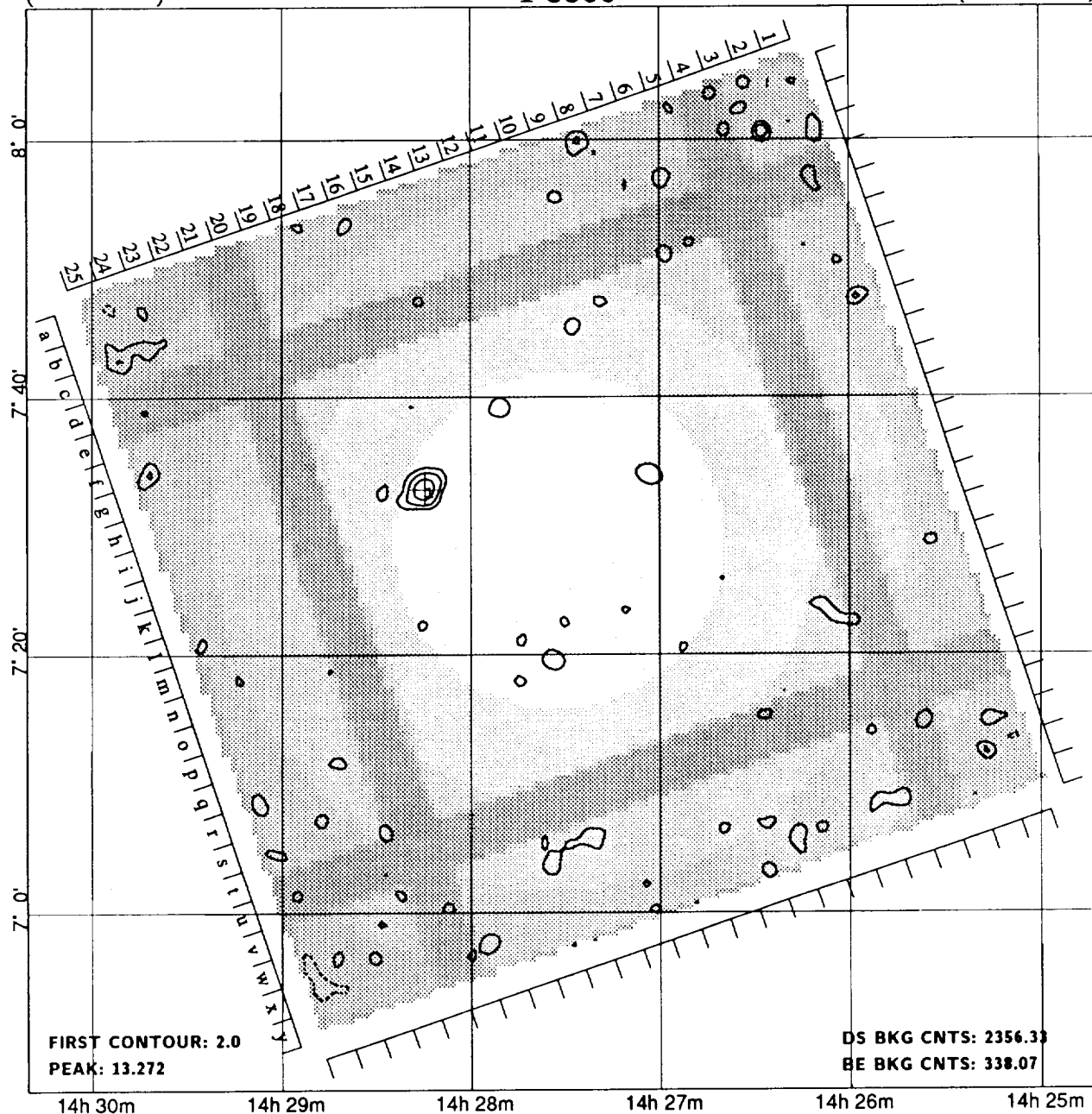
DATE: 1980/195 - 1980/217  
 LIVETIME: 3058.7s  
 ROLL ANGLE:  $69.9^{\circ}$

NH:  $4.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 27m)

I 3300

(14h 27m)



FIELD CENTER:  $14^h 27^m 31.2^s$   $07^\circ 28' 11''$  (B1950)  
 $14^h 29^m 59.7^s$   $07^\circ 14' 53''$  (J2000)  
 $l: 357.08$   $b: 59.32$

DATE: 1979/191 - 1979/191  
 LIVETIME: 1909.4s  
 ROLL ANGLE:  $71.3^\circ$

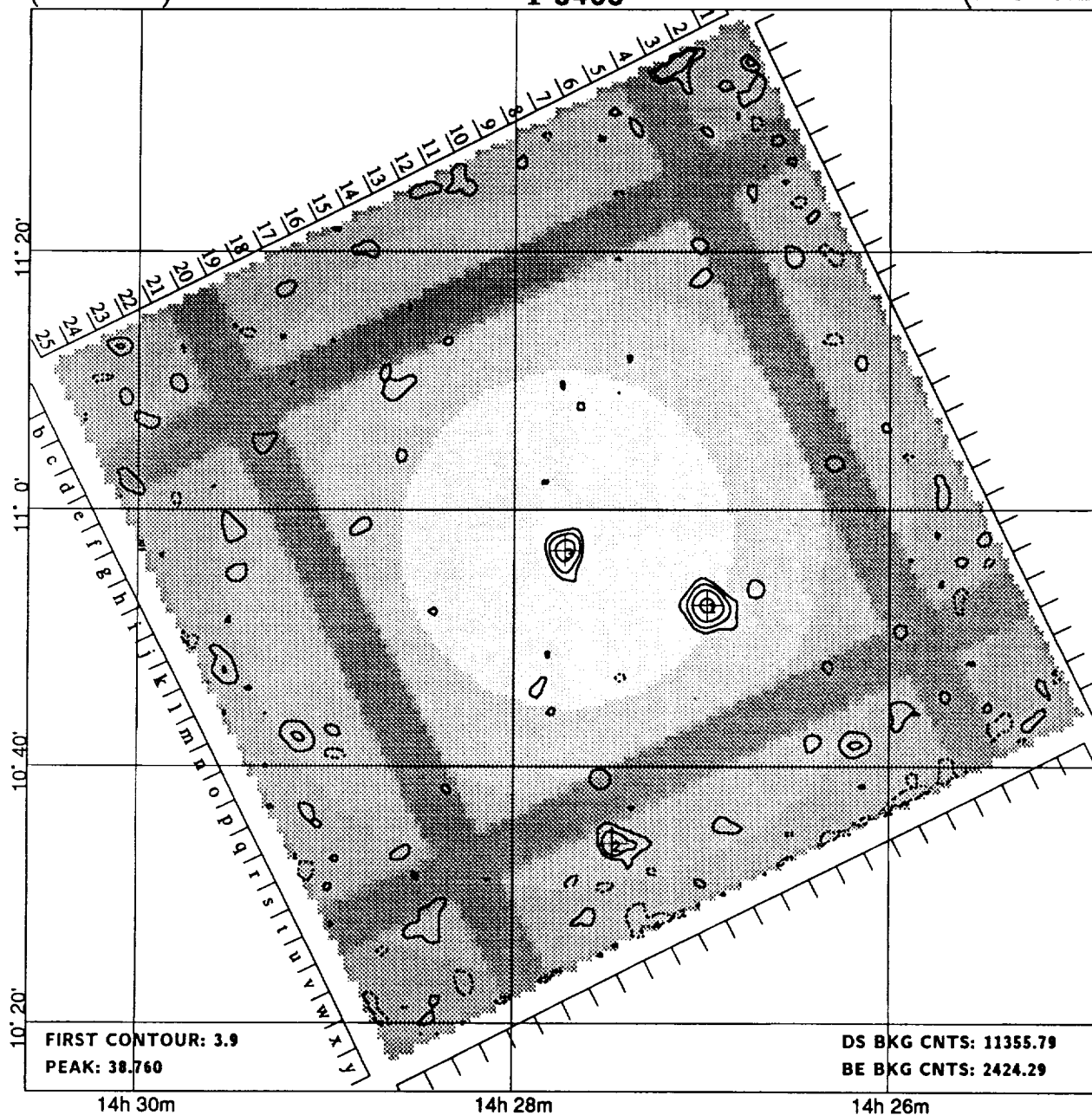
NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3287	1	14 28 14.5	07 32 53	41	0.0352	0.0057	43.7	6.3	6.2	0.9	0	11.8	H	

(14h 27m)

I 8468

(14h 27m)



## NEW TYPE OF EXTRAGALACTIC OBJECT: 1427+109

FIELD CENTER:  $14^h 27^m 43.7^s$   $10^\circ 56' 43''$  (B1950)  
 $14^h 30^m 09.7^s$   $10^\circ 43' 26''$  (J2000)  
 $\ell$ : 2.45  $b$ : 61.57

DATE: 1980/190 - 1980/190  
 LIVETIME: 9202.0s  
 ROLL ANGLE:  $63.6^\circ$

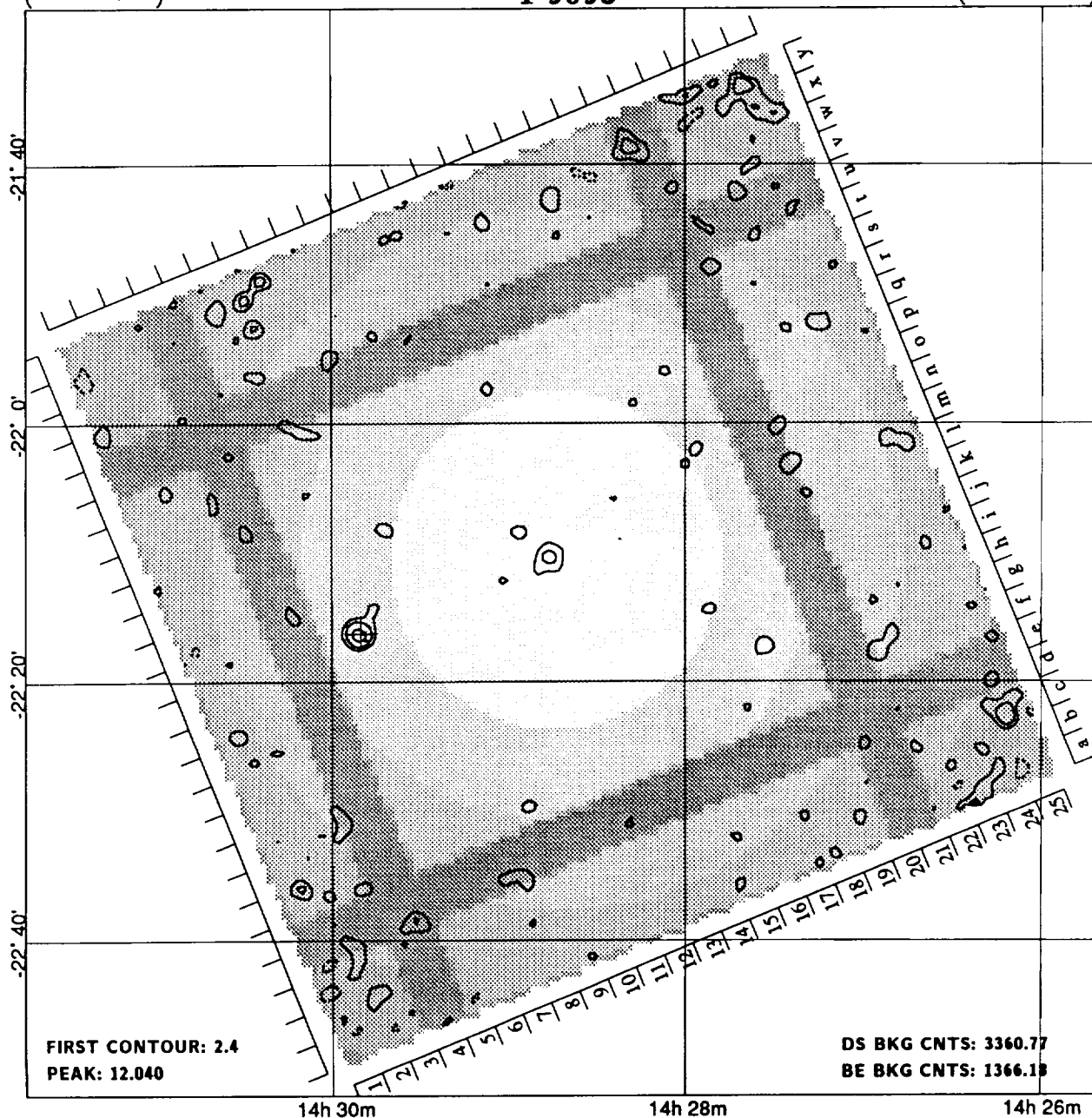
NH:  $1.8E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3282	1	14 26 58.1	10 52 36	38	0.0219	0.0022	128.5	31.5	10.2	1.1	0	11.8	H
3285	2	14 27 28.2	10 34 01	52	*0.0080	0.0018	33.2	20.8	4.5	1.1	501	22.8	H
3286	3	14 27 43.7	10 56 51	32	0.0134	0.0016	91.9	35.1	8.2	0.9	0	0.2	H

(14h 28m)

I 9093

(14h 28m)

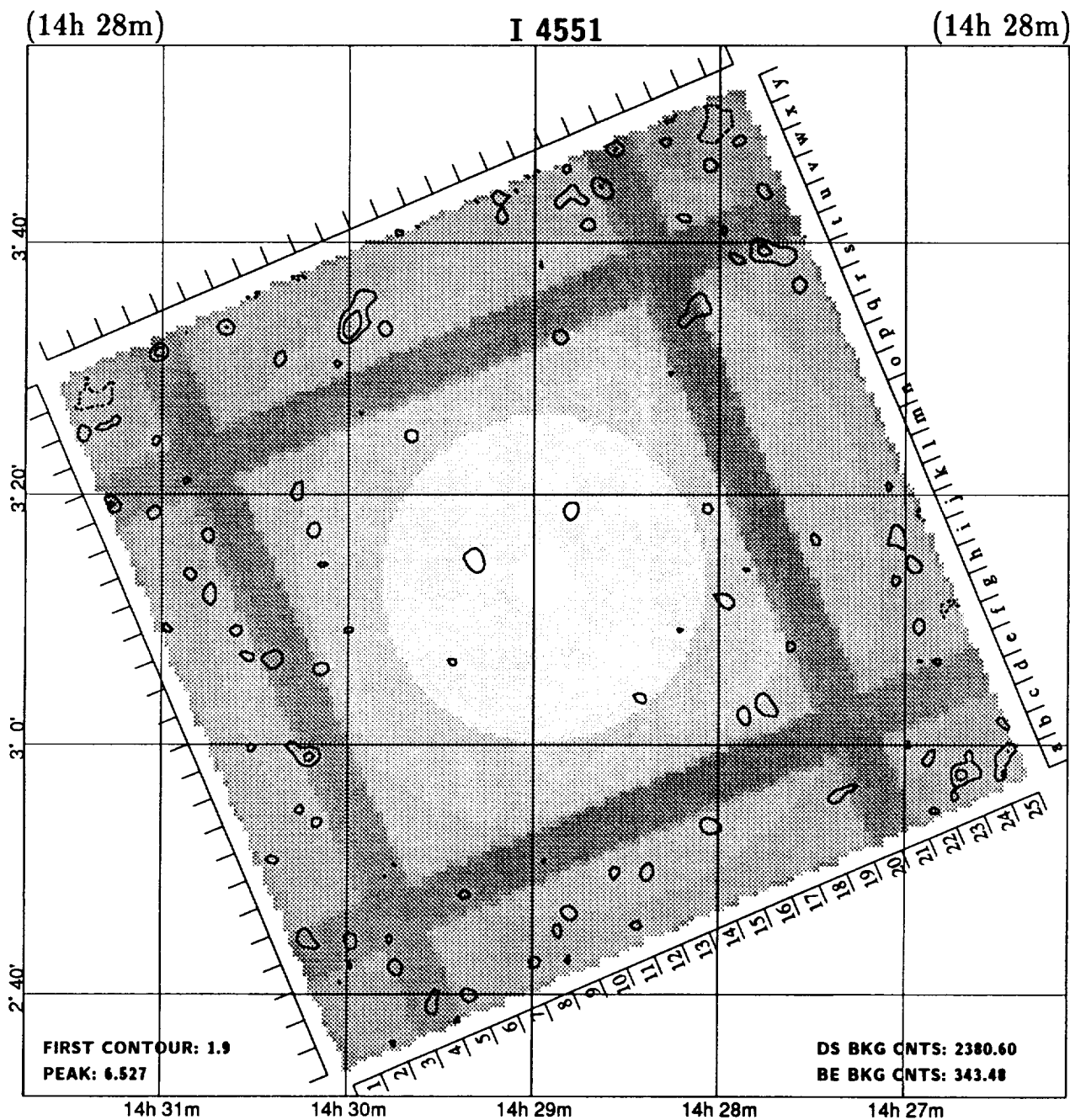
CLUSTERS OF GALAXIES AT MODERATE REDSHIFTS( $0.1 < Z < 0.3$ ): 28

FIELD CENTER:  $14^{\text{h}}28^{\text{m}}42.0^{\text{s}}$   $-22^{\circ}09'59''$  (B1950)  
 $14^{\text{h}}31^{\text{m}}32.4^{\text{s}}$   $-22^{\circ}23'14''$  (J2000)  
 $l$ : 331.41  $b$ : 34.89

DATE: 1981/ 43 - 1981/ 43  
 LIVETIME: 2723.4s  
 ROLL ANGLE:  $-112.1^{\circ}$

NH:  $7.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3290	1L	14 29 50.1	-22 16 18	51	0.0221	0.0046	34.2	4.8	4.7	0.8	0	16.9		



IC 1024, EL & SO GAL. WITH COMPACT RADIO CORE

FIELD CENTER:  $14^{\text{h}}28^{\text{m}}55.5^{\text{s}}$   $03^{\circ}13'47''$  (B1950)  
 $14^{\text{h}}31^{\text{m}}27.0^{\text{s}}$   $03^{\circ}00'33''$  (J2000)  
 $l: 352.01$   $b: 56.04$

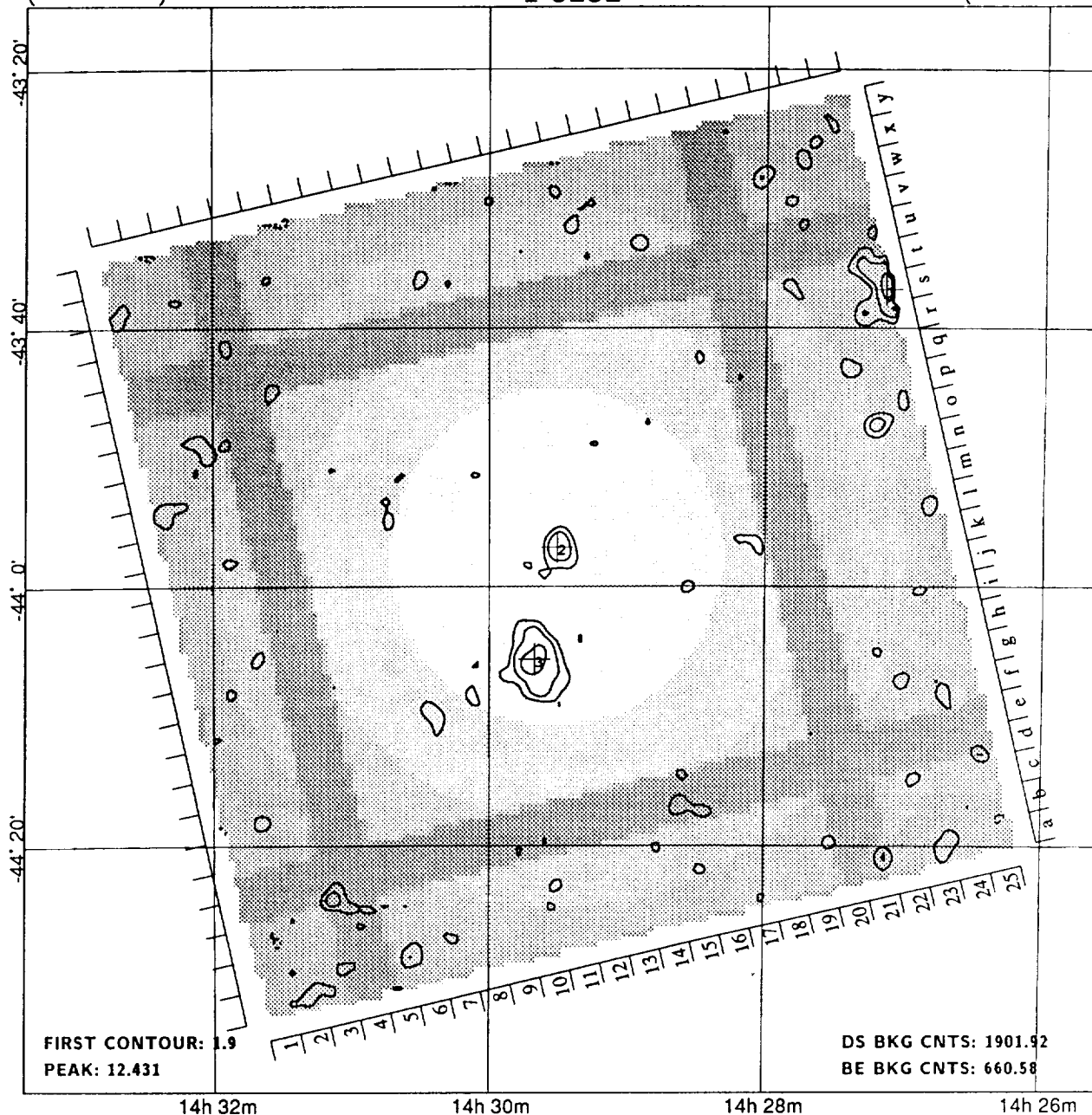
DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 1929.1s  
 ROLL ANGLE:  $-113.1^{\circ}$

NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 29m)

I 5252

(14h 29m)



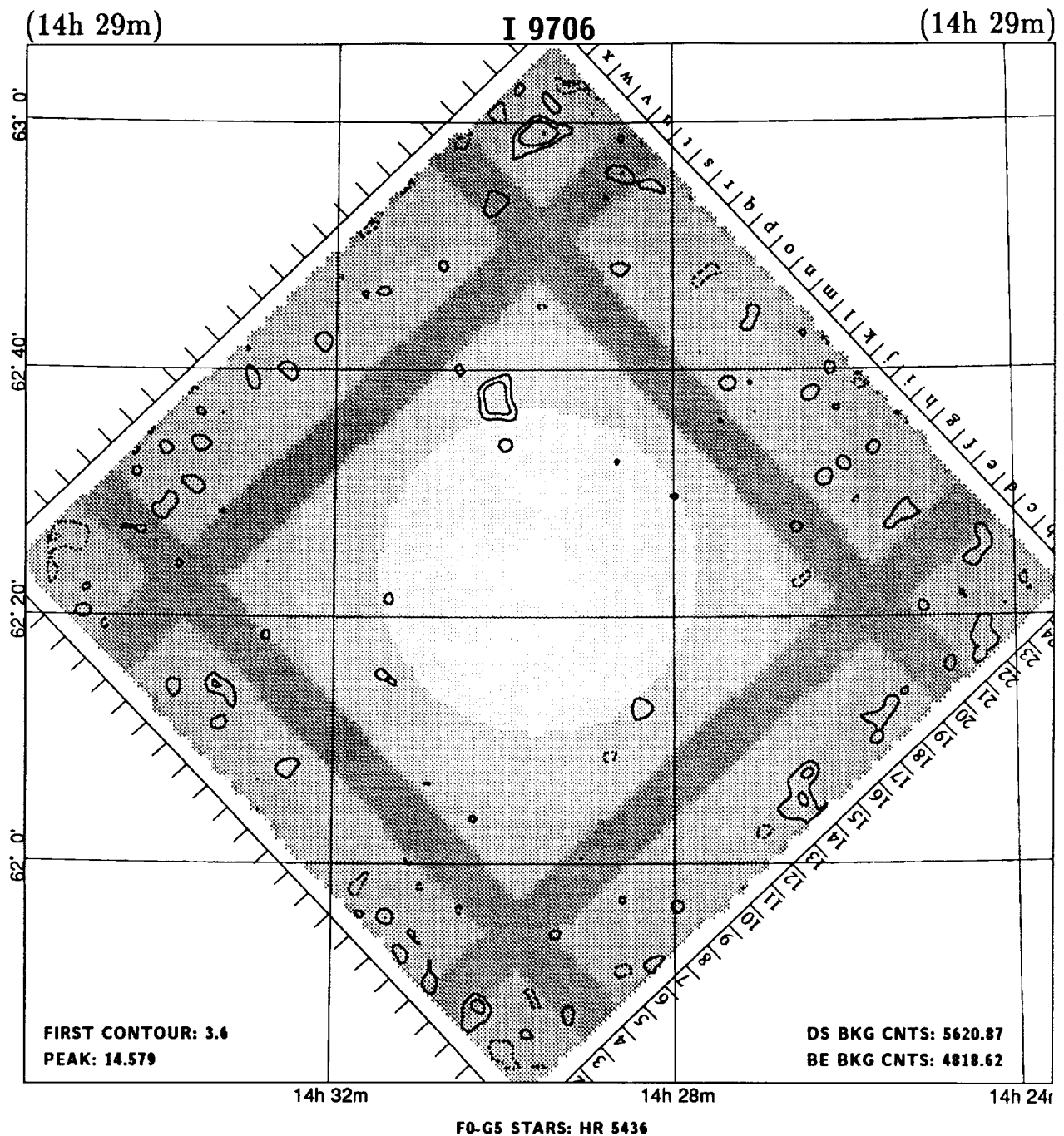
## NGC 5643, X-RAY AND OPTICAL STUDY OF NEARBY SEYFERT 2 GALAXIES

FIELD CENTER:  $14^{\text{h}}29^{\text{m}}28.0^{\text{s}}$   $-43^{\circ}57'11''$  (B1950)  
 $14^{\text{h}}32^{\text{m}}41.3^{\text{s}}$   $-44^{\circ}10'24''$  (J2000)  
 $l$ : 321.44  $b$ : 15.03

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 1541.2s  
 ROLL ANGLE:  $-103.0^{\circ}$

NH:  $1.1\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3284	1	14 27 08.5	-43 37 00	54	*0.046	0.012	18.2	2.8	4.0	1.8	803	32.1	EH	
3288	2	14 29 30.3	-43 56 56	36	0.0247	0.0052	28.3	6.7	4.8	0.9	0	0.6	H	G
3289	3	14 29 40.1	-44 05 37	41	0.0502	0.0073	53.2	6.8	6.9	1.8	0	8.7	H	



FIELD CENTER:  $14^h 29^m 34.5^s$   $62^\circ 24' 21''$  (B1950)  
 $14^h 30^m 50.7^s$   $62^\circ 11' 07''$  (J2000)  
 $l: 104.66$   $b: 51.27$

DATE: 1980/356 - 1980/356  
 LIVETIME: 4554.8s  
 ROLL ANGLE:  $-133.6^\circ$

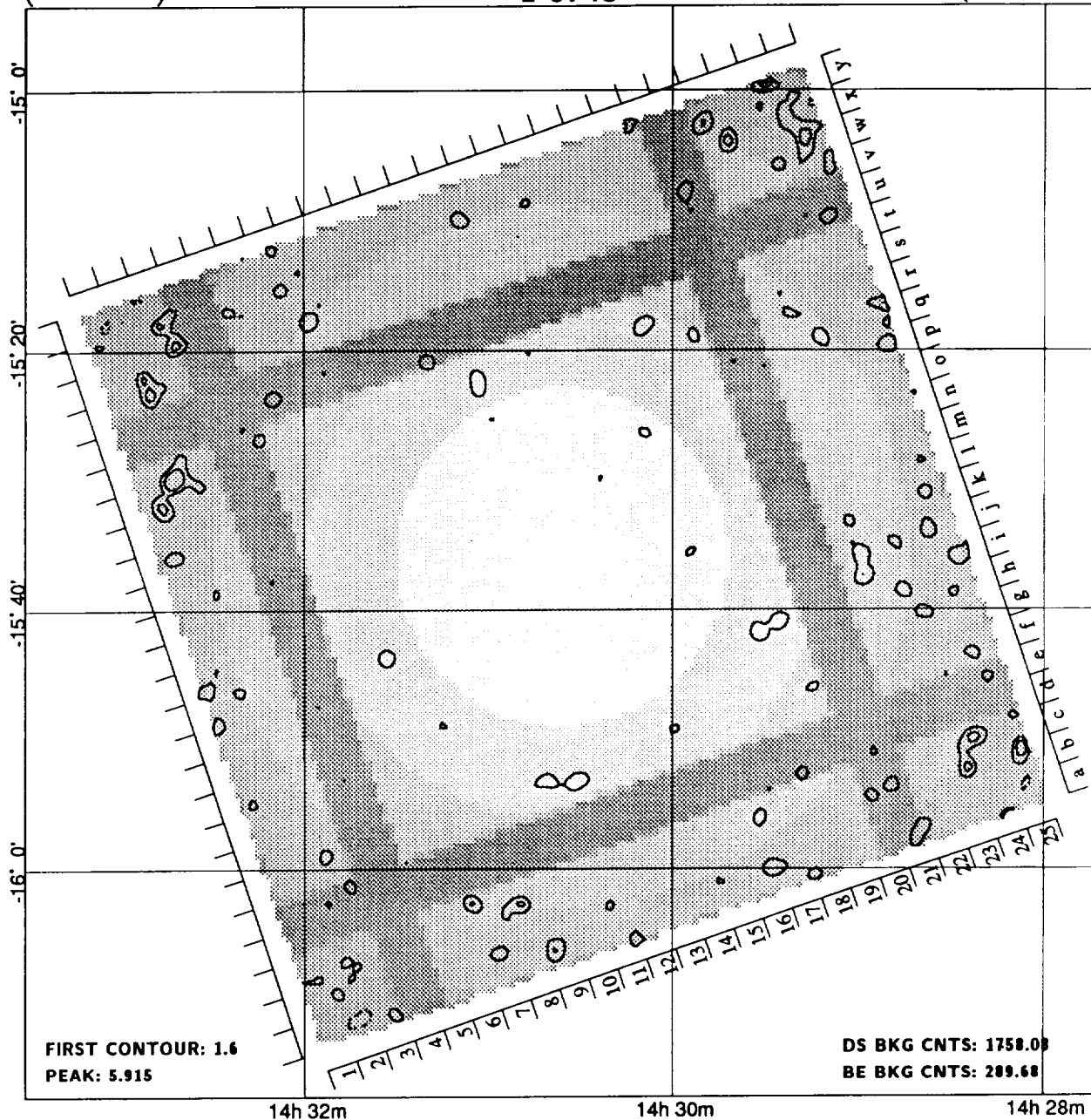
NH:  $1.0E+20$   
 REF/ID: I  
 FIELD FLAGS: L



(14h 30m)

I 6743

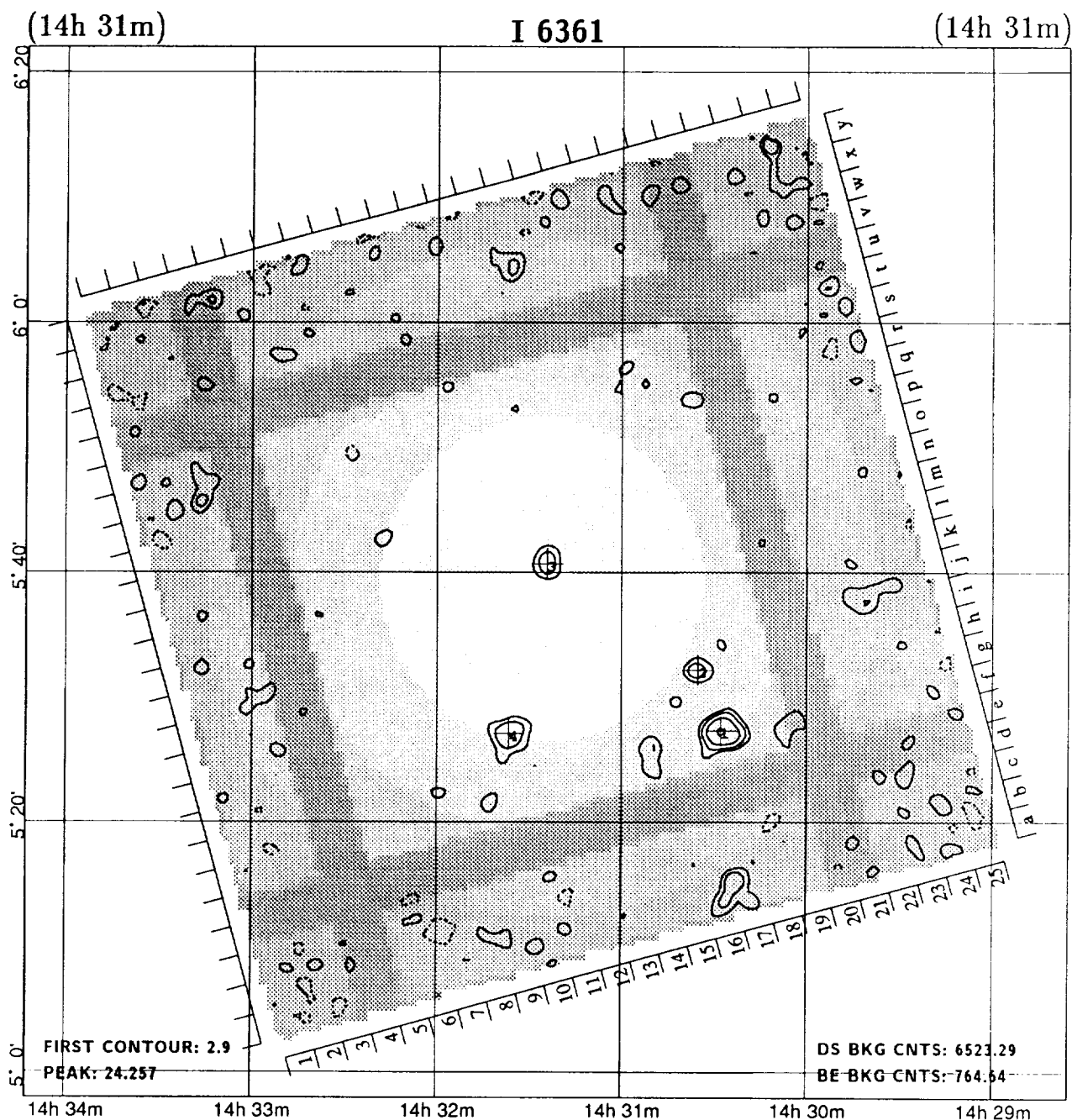
(14h 30m)



FIELD CENTER:  $14^h 30^m 36.0^s$   $-15^\circ 35' 32''$  (B1950)  
 $14^h 33^m 21.3^s$   $-15^\circ 48' 42''$  (J2000)  
 $l$ : 335.88  $b$ : 40.45

DATE: 1981/ 46 - 1981/ 46  
 LIVETIME: 1424.6s  
 ROLL ANGLE:  $-108.7^\circ$

NH:  $7.4E+20$   
 REF/ID:  
 FIELD FLAGS:



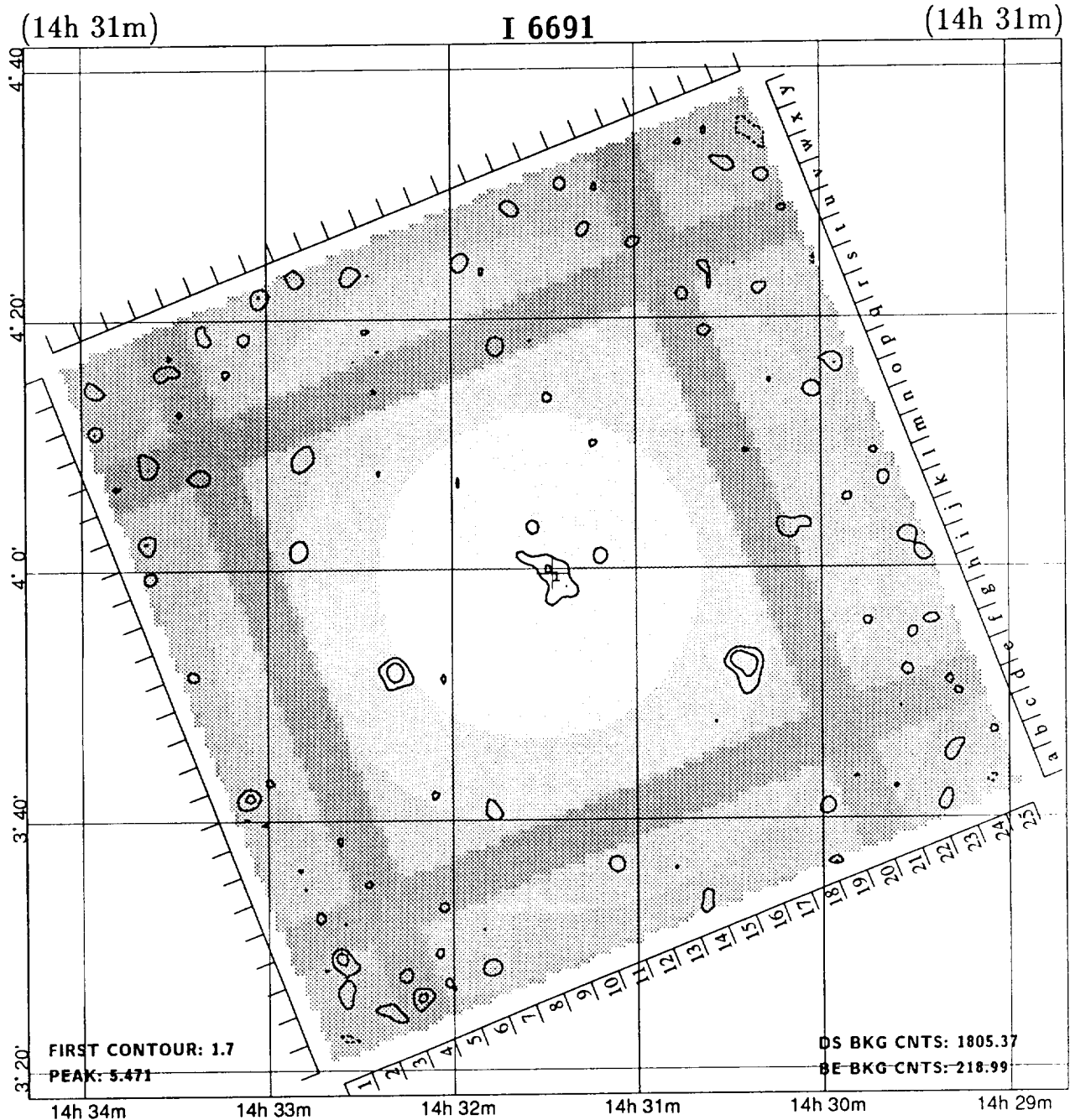
N 5674, EMISSION LINE GALAXY SURVEY

FIELD CENTER:  $14^{\text{h}}31^{\text{m}}24.0^{\text{s}}$   $05^{\circ}39'59''$  (B1950)  
 $14^{\text{h}}33^{\text{m}}53.7^{\text{s}}$   $05^{\circ}26'51''$  (J2000)  
 $l: 355.89$   $b: 57.37$

DATE: 1980/ 36 - 1980/ 36  
 LIVETIME: 5286.0s  
 ROLL ANGLE:  $-105.3^{\circ}$

NH:  $2.4 \times 10^{20}$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3291	1	14 30 27.8	05 27 18	49	0.0283	0.0034	79.3	13.7	8.2	1.1	0	18.5	H	AGN
3292	2	14 30 35.2	05 32 12	43	0.0075	0.0019	23.8	13.2	3.9	0.7	0	14.1	H	
3294	3	14 31 24.2	05 40 40	36	0.0084	0.0018	32.8	18.2	4.6	0.7	0	0.9		
3297	4	14 31 36.6	05 27 03	42	0.0113	0.0022	37.6	16.4	5.1	1.0	0	13.3	H	



**MKW 7: CD GALAXIES IN POOR CLUSTERS**

FIELD CENTER:  $14^h 31^m 30.0^s$   $03^\circ 59' 59''$  (B1950)  
 $14^h 34^m 00.9^s$   $03^\circ 46' 52''$  (J2000)  
 $l: 353.79$   $b: 56.17$

DATE: 1980/ 17 - 1980/ 18  
 LIVETIME: 1463.0s  
 ROLL ANGLE:  $-111.5^\circ$

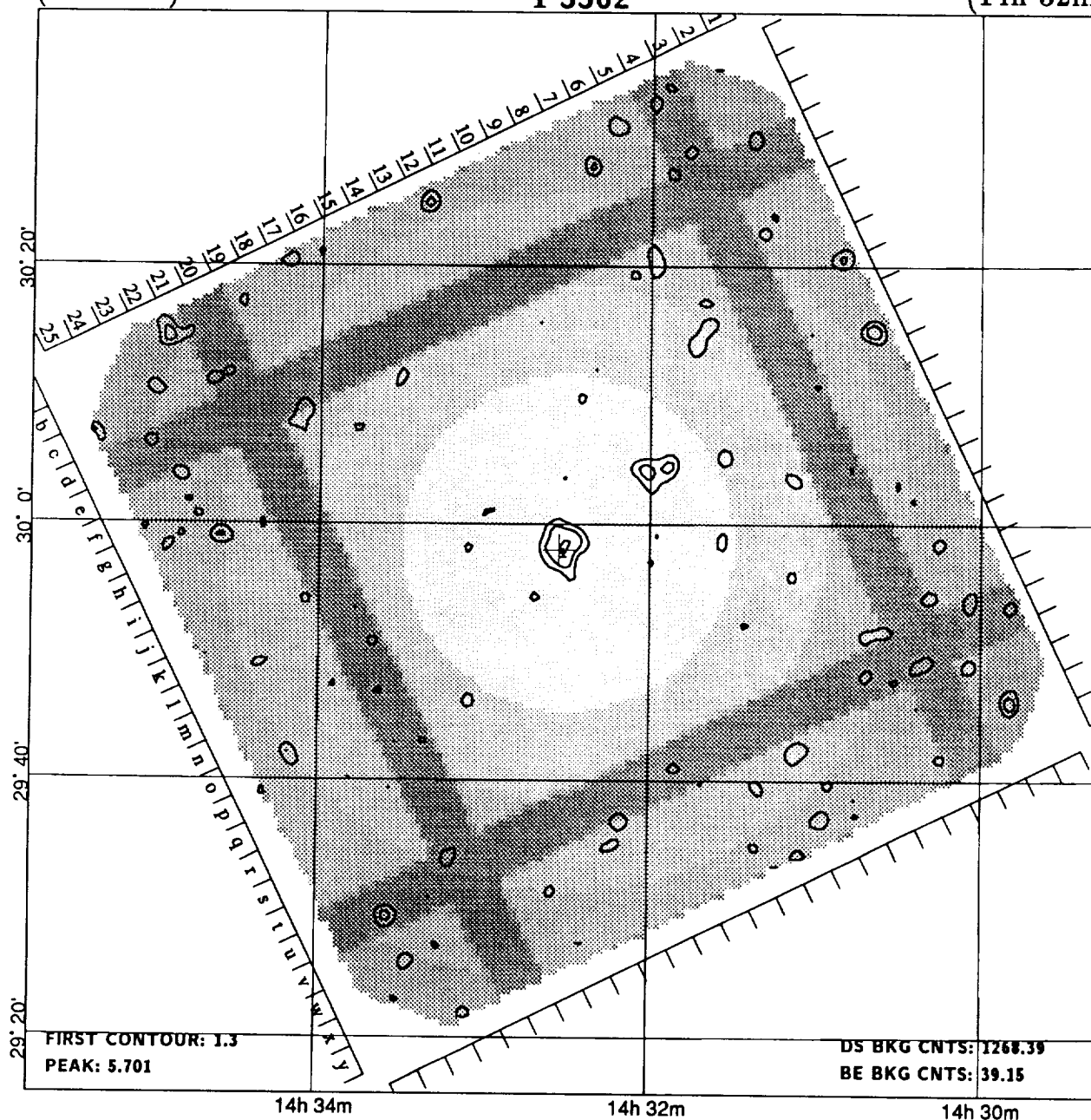
NH:  $2.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3296	1	14 31 27.4	03 59 36	41	0.0180	0.0046	19.6	5.4	3.9	1.4	0	0.4	H	CLG

(14h 32m)

I 5562

(14h 32m)



Sigma B00

FIELD CENTER:  $14^{\text{h}}32^{\text{m}}30.0^{\text{s}}$   $29^{\circ}57'40''$  (B1950)  
 $14^{\text{h}}34^{\text{m}}39.9^{\text{s}}$   $29^{\circ}44'35''$  (J2000)  
 $l: 45.62$   $b: 67.20$

DATE: 1980/180 - 1980/180

NH: 1.3E+20

LIVETIME: 1027.8s

REF/ID:

ROLL ANGLE: 64.0°

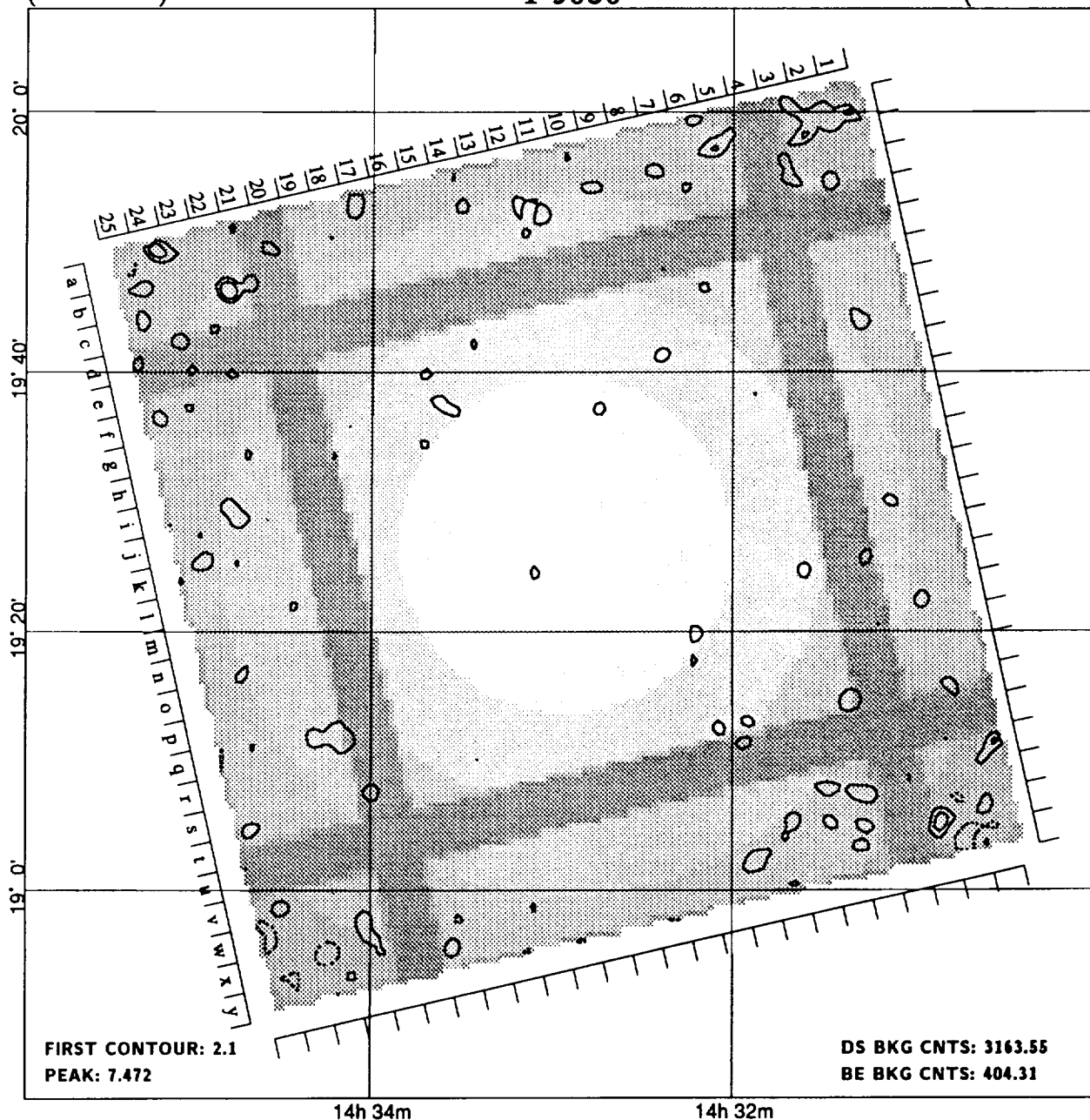
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3298	1	14 32 33.1	29 57 59	36	0.0336	0.0070	25.6	3.4	4.8	1.3	0	0.9	H	S

(14h 32m)

I 9030

(14h 32m)



FIELD CENTER:  $14^{\text{h}}32^{\text{m}}56.6^{\text{s}}$   $19^{\circ}25'57''$  (B1950)  
 $14^{\text{h}}35^{\text{m}}15.7^{\text{s}}$   $19^{\circ}12'53''$  (J2000)  
 $\ell$ : 20.09  $b$ : 64.92

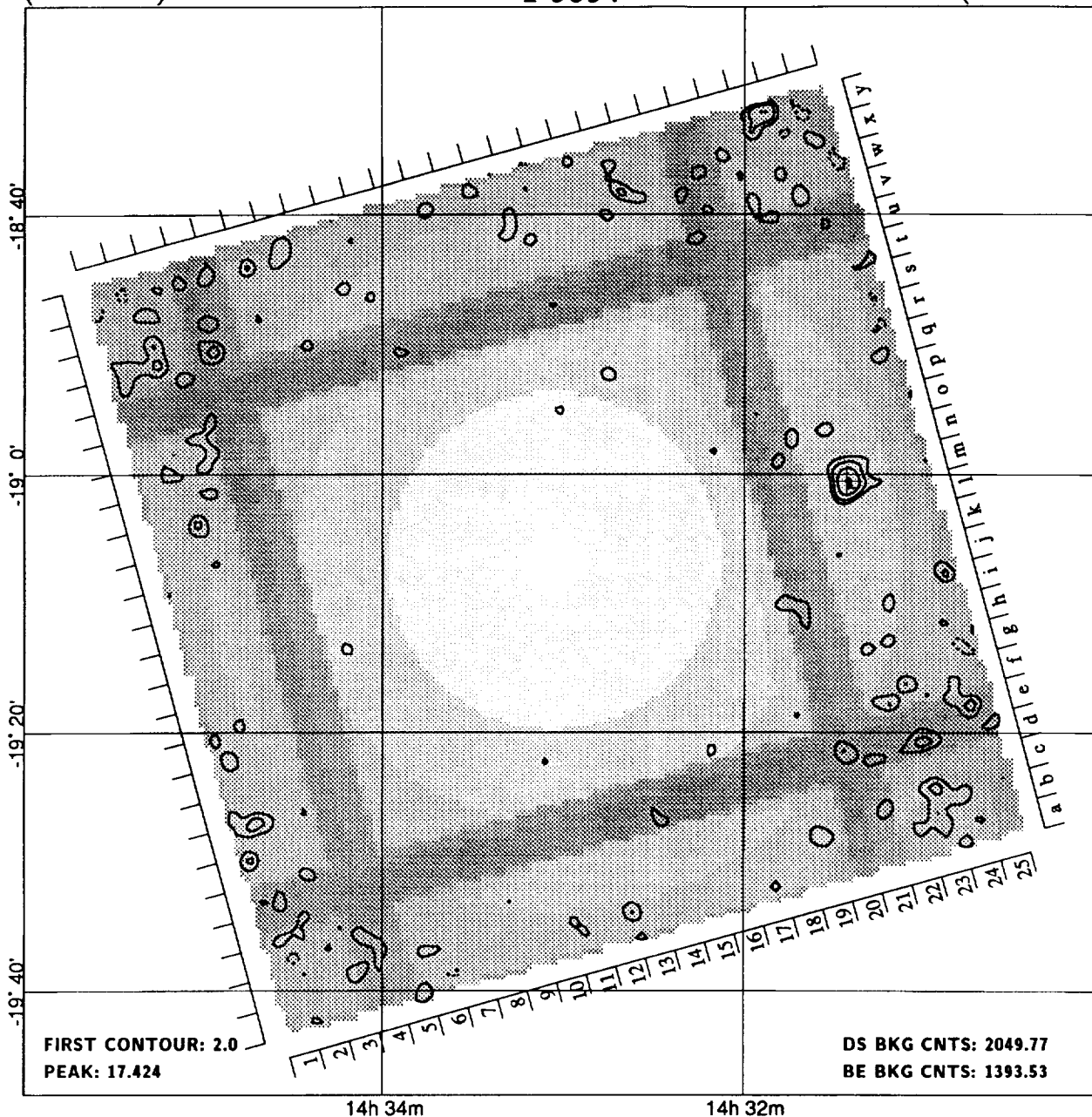
DATE: 1980/220 - 1980/220  
 LIVETIME: 2563.5s  
 ROLL ANGLE:  $77.3^{\circ}$

NH:  $2.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 33m)

I 9094

(14h 33m)

CLUSTERS OF GALAXIES AT MODERATE REDSHIFTS( $0.1 < Z < 0.3$ ): 29

FIELD CENTER:  $14^h 33^m 00.0^s$   $-19^\circ 05' 59''$  (B1950)  
 $14^h 35^m 48.3^s$   $-19^\circ 19' 03''$  (J2000)  
 $l$ : 334.30  $b$ : 37.12

DATE: 1981/ 46 - 1981/ 46  
 LIVETIME: 1661.0s  
 ROLL ANGLE:  $-105.3^\circ$

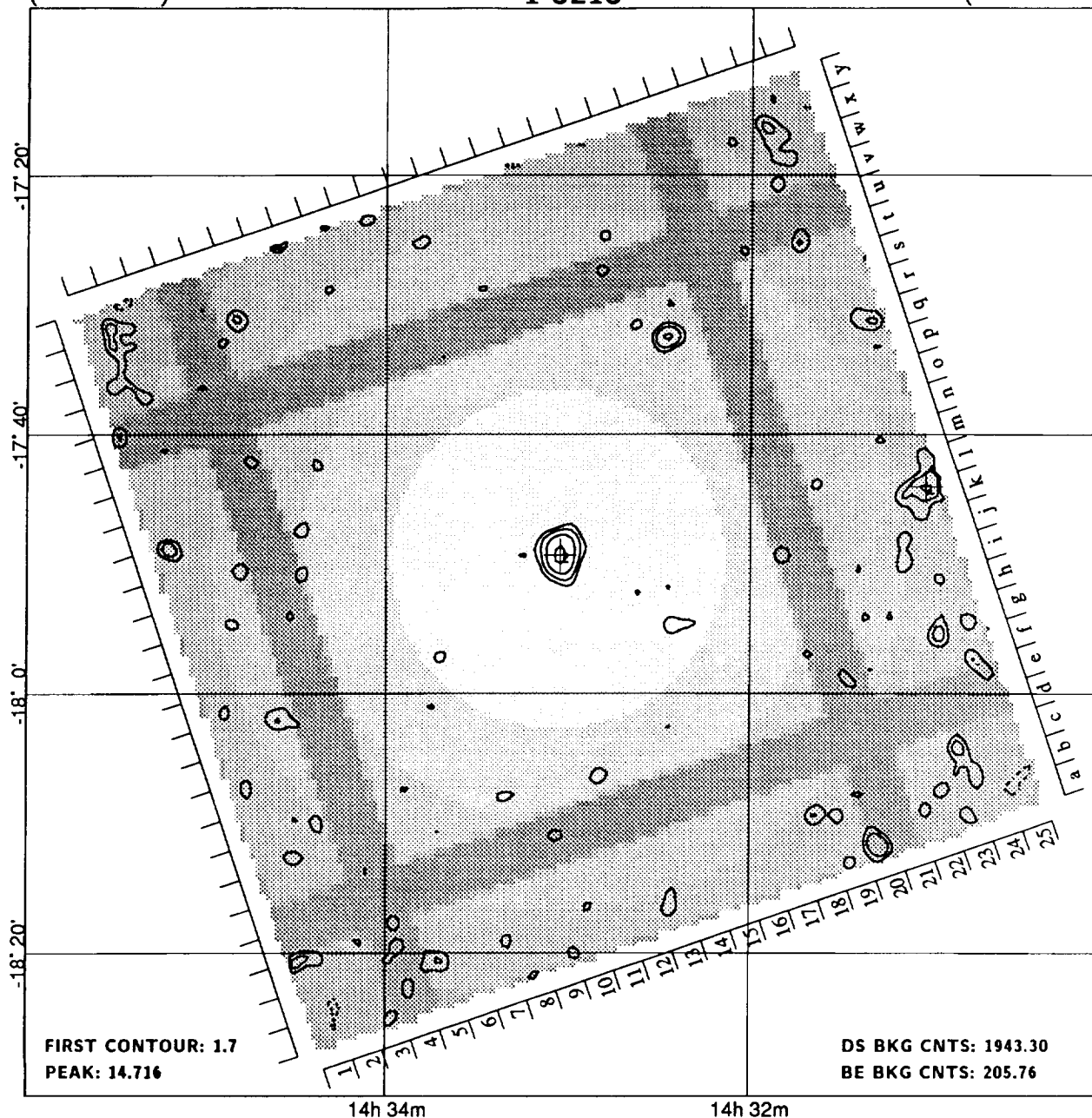
NH:  $7.6E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3295	1L	14 31 26.2	-19 00 32	50	0.0436	0.0099	32.8	8.2	4.3	1.0	0	22.8		

(14h 33m)

I 3215

(14h 33m)



RS CVN SYSTEMS: RV LIB

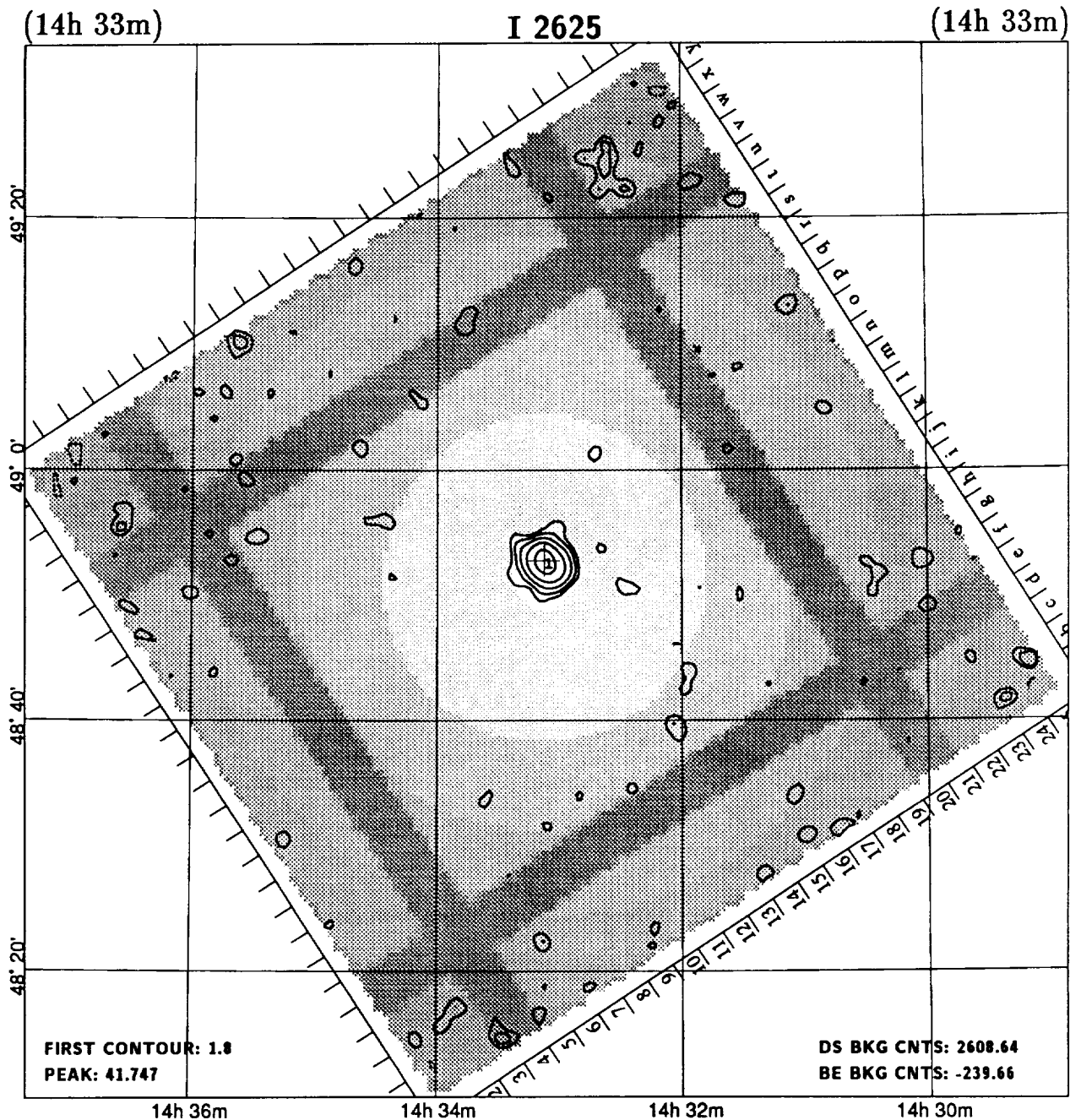
FIELD CENTER:  $14^h 33^m 01.5^s$   $-17^\circ 49' 08''$  (B1950)  
 $14^h 35^m 48.7^s$   $-18^\circ 02' 12''$  (J2000)  
 $l: 335.10$   $b: 38.23$

DATE: 1980/ 41 - 1980/ 41  
 LIVETIME: 1574.7s  
 ROLL ANGLE:  $-108.7^\circ$

NH:  $7.1E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3293	1	14 31 02.6	-17 44 02	55	*0.0303	0.0085	15.6	3.4	3.6	1.3	602	28.8	EH	
3299	2	14 33 02.5	-17 49 20	32	0.0603	0.0074	70.8	5.2	8.1	1.1	0	0.4	H	CV





SEYFERT GALAXY SURVEY: MKN 474

FIELD CENTER:  $14^{\text{h}}33^{\text{m}}06.0^{\text{s}}$   $48^{\circ}51'59''$  (B1950)  
 $14^{\text{h}}34^{\text{m}}52.3^{\text{s}}$   $48^{\circ}38'55''$  (J2000)  
 $l: 86.96$   $b: 60.62$

DATE: 1980/ 3 - 1980/ 3  
 LIVETIME: 2113.9s  
 ROLL ANGLE: -123.2°

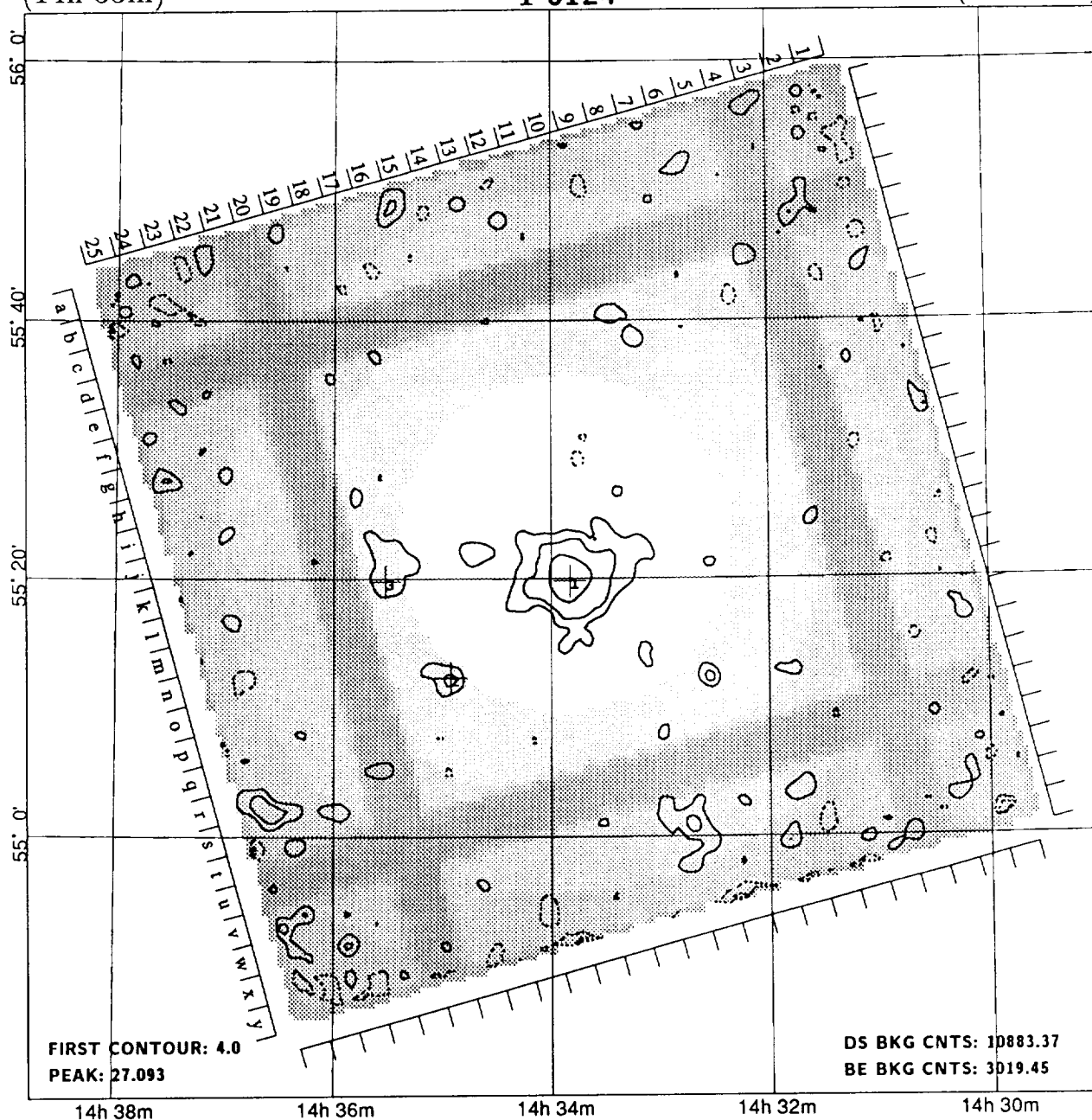
NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3300	1	14 33 07.5	48 52 48	31	0.1132	0.0086	177.4	5.6	13.1	1.4	0	0.8	H	SY

(14h 33m)

I 6124

(14h 33m)



## A 1940, DETAILED STUDY OF NEARBY CLUSTERS

FIELD CENTER: 14<sup>h</sup>33<sup>m</sup>54.0<sup>s</sup> 55°21'59" (B1950)14<sup>h</sup>35<sup>m</sup>27.5<sup>s</sup> 55°08'57" (J2000)

ℓ: 96.14 b: 56.23

DATE: 1980/205 - 1980/207

LIVETIME: 8819.1s

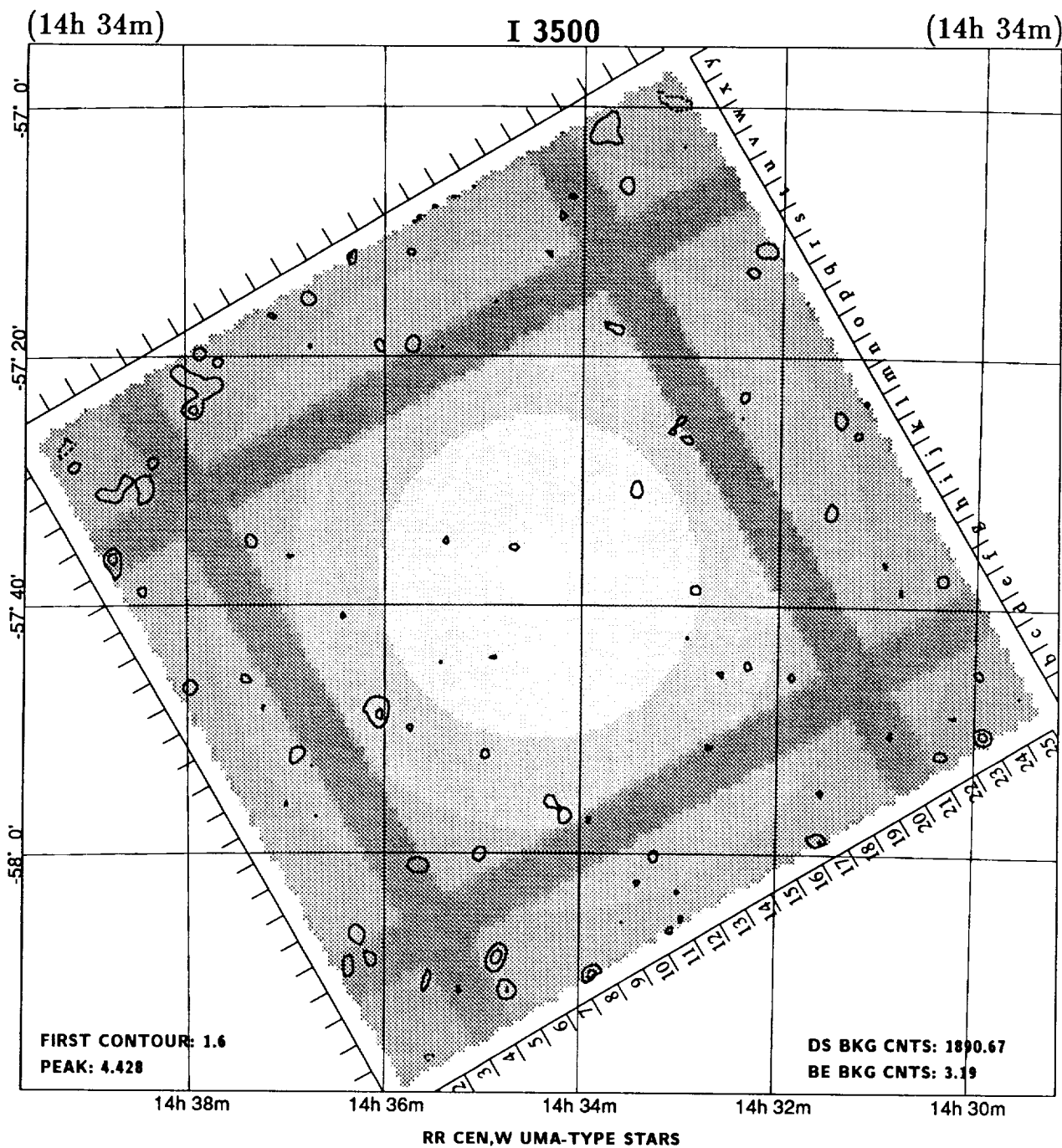
ROLL ANGLE: 74.8°

NH: 1.3E+20

REF/ID:

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3301	1	14 33 49.4	55 19 49	31	0.0226	0.0021	145.6	37.4	10.8	3.8	0	1.5	H	
3302	2	14 34 55.5	55 12 18	45	0.0053	0.0014	28.5	28.5	3.8	0.8	0	13.2	H	
3304	3	14 35 31.6	55 19 46	47	0.0053	0.0014	28.1	28.9	3.7	1.7	300	14.1		



FIELD CENTER:  $14^{\text{h}}34^{\text{m}}24.0^{\text{s}}$   $-57^{\circ}37'11''$  (B1950)  
 $14^{\text{h}}38^{\text{m}}04.4^{\text{s}}$   $-57^{\circ}50'09''$  (J2000)  
 $l: 316.76$   $b: 2.14$

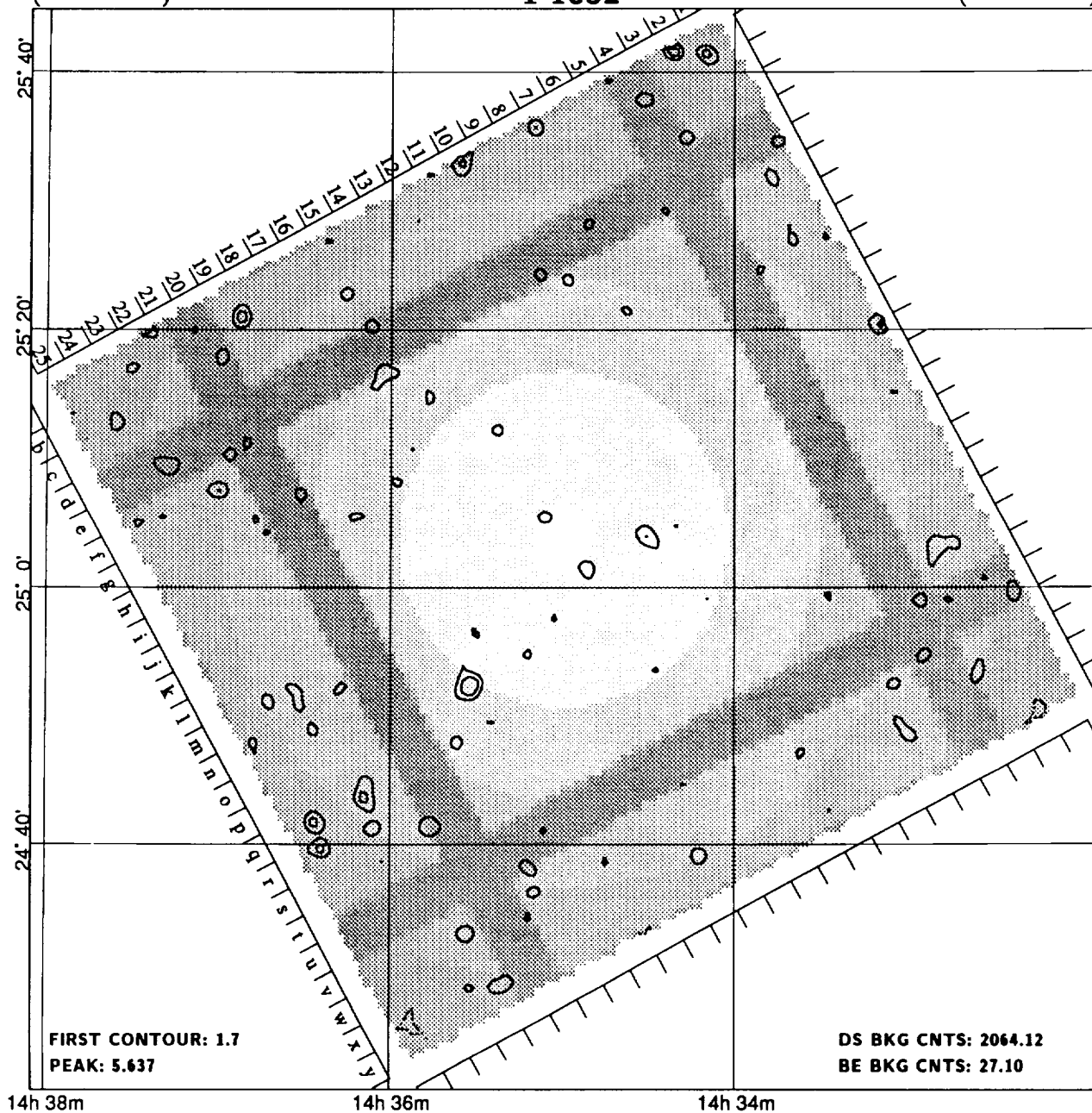
DATE: 1979/ 56 - 1979/ 57  
 LIVETIME: 1532.1s  
 ROLL ANGLE:  $-120.4^{\circ}$

NH:  $1.6\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

(14h 35m)

I 1852

(14h 35m)



## A1939: X-RAY STUDY OF CLUSTERS OF GALAXIES

FIELD CENTER:  $14^{\text{h}}35^{\text{m}}00.0^{\text{s}}$   $25^{\circ}02'59''$  (B1950)  
 $14^{\text{h}}37^{\text{m}}14.2^{\text{s}}$   $24^{\circ}50'01''$  (J2000)  
 $l$ : 33.40  $b$ : 66.16

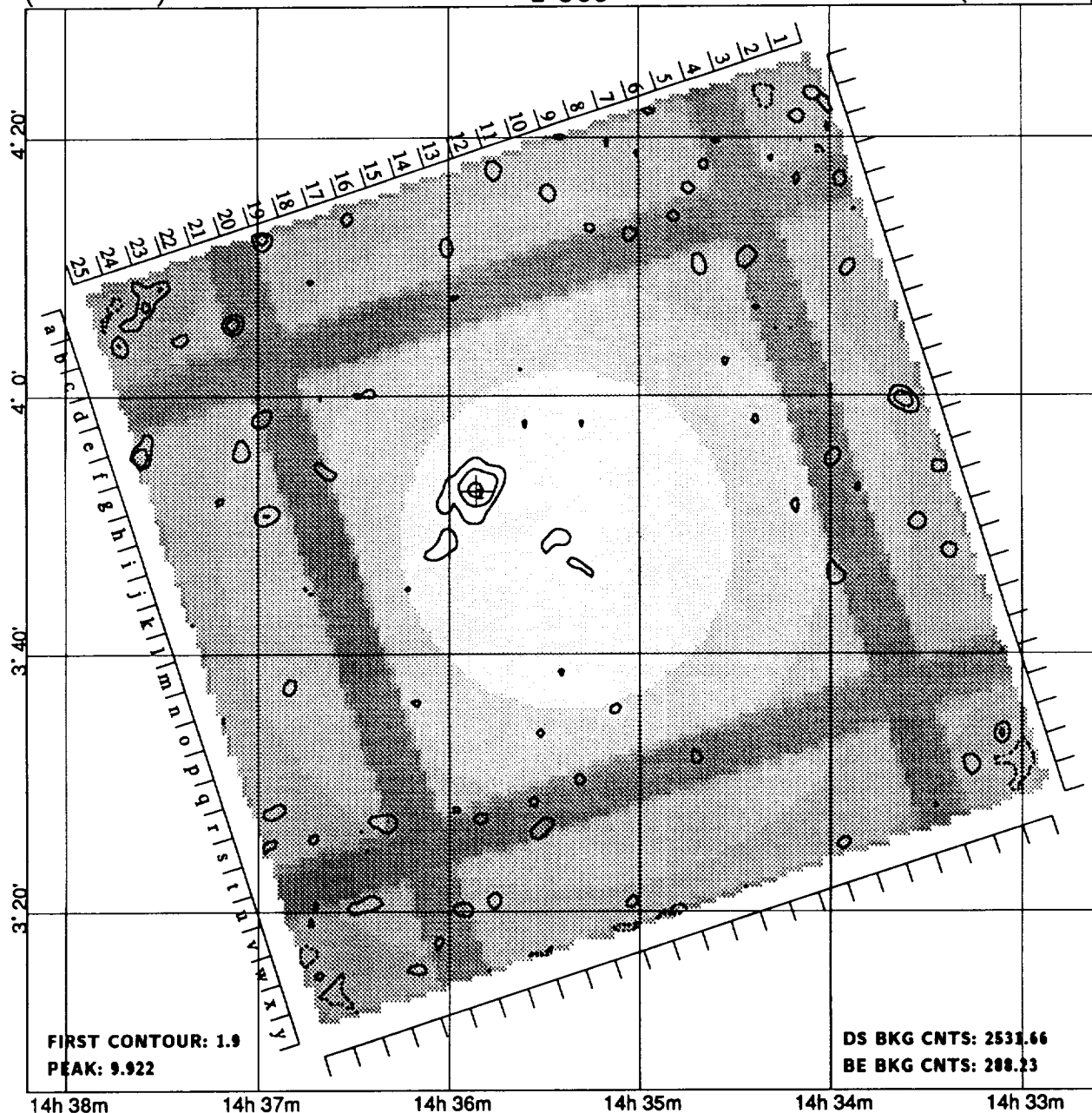
DATE: 1979/191 - 1979/191  
 LIVETIME: 1672.6s  
 ROLL ANGLE:  $61.6^{\circ}$

NH:  $2.7\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

(14h 35m)

I 369

(14h 35m)



## PKS 1435+03.8 RADIO SOURCE SURVEY

FIELD CENTER:  $14^{\text{h}}35^{\text{m}}24.0^{\text{s}}$   $03^{\circ}48'11''$  (B1950)  
 $14^{\text{h}}37^{\text{m}}55.0^{\text{s}}$   $03^{\circ}35'14''$  (J2000)  
 $l: 354.79$   $b: 55.35$

DATE: 1979/202 - 1979/202  
 LIVETIME: 2051.5s  
 ROLL ANGLE:  $72.0^{\circ}$

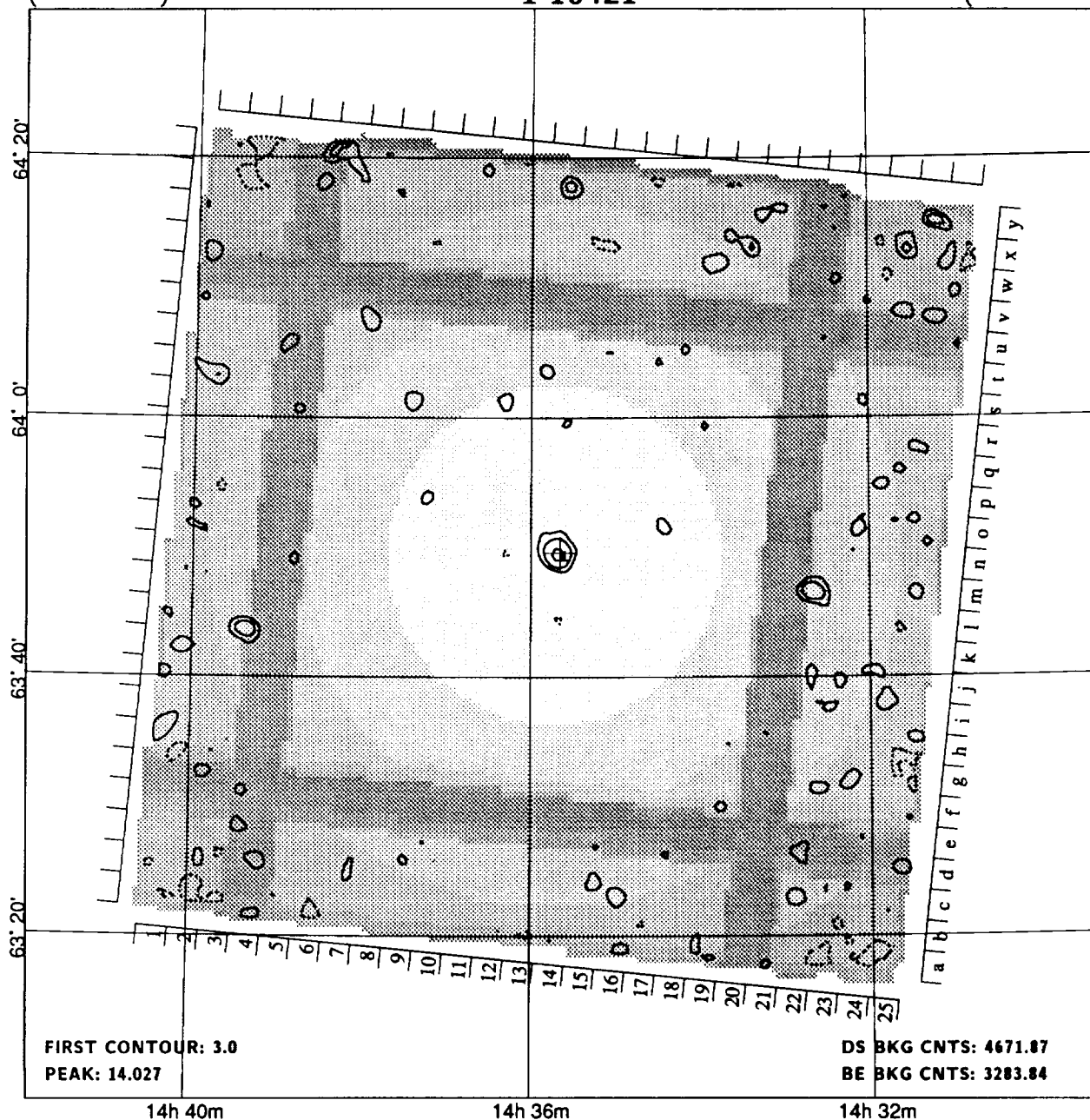
NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3307	1	14 35 51.6	03 52 42	42	0.0247	0.0046	34.7	7.3	5.4	1.5	0	8.4	AH	

(14h 35m)

I 10421

(14h 35m)



## QSO 1435+63, MEASUREMENT OF CONTINUUM &amp; ITS EXCESS

FIELD CENTER:  $14^{\text{h}}35^{\text{m}}37.2^{\text{s}}$   $63^{\circ}49'35''$  (B1950)  
 $14^{\text{h}}36^{\text{m}}45.7^{\text{s}}$   $63^{\circ}36'37''$  (J2000)  
 $l: 105.17$   $b: 49.73$

DATE: 1981/ 40 - 1981/ 40  
 LIVETIME: 3785.8s  
 ROLL ANGLE:  $-84.4^{\circ}$

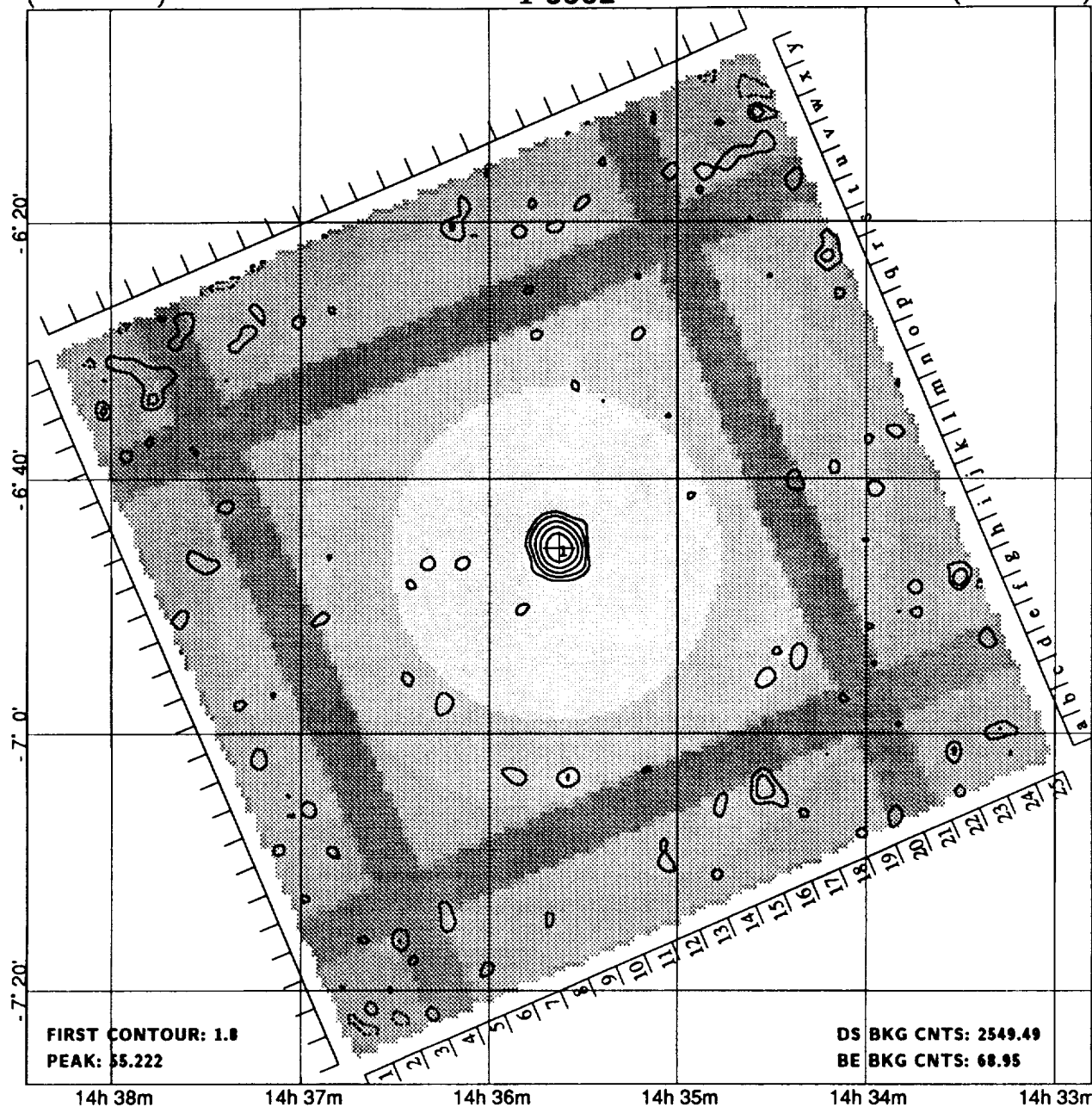
NH:  $1.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3306	1L	14 35 39.2	63 49 30	35	0.0217	0.0036	61.2	16.8	5.8	0.9	0	0.5	

(14h 35m)

I 5382

(14h 35m)



**FIELD CENTER:**  $14^h 35^m 37.5^s$   $-06^\circ 45' 21''$  (B1950)  
 $14^h 38^m 16.3^s$   $-06^\circ 58' 18''$  (J2000)  
 $l: 343.98$   $b: 47.21$

**DATE:** 1980/ 40 - 1980/ 40

**NH:**  $5.5E+20$

**LIVETIME:** 2066.0s

**REF/ID:**

**ROLL ANGLE:**  $-113.2^\circ$

**FIELD FLAGS:**

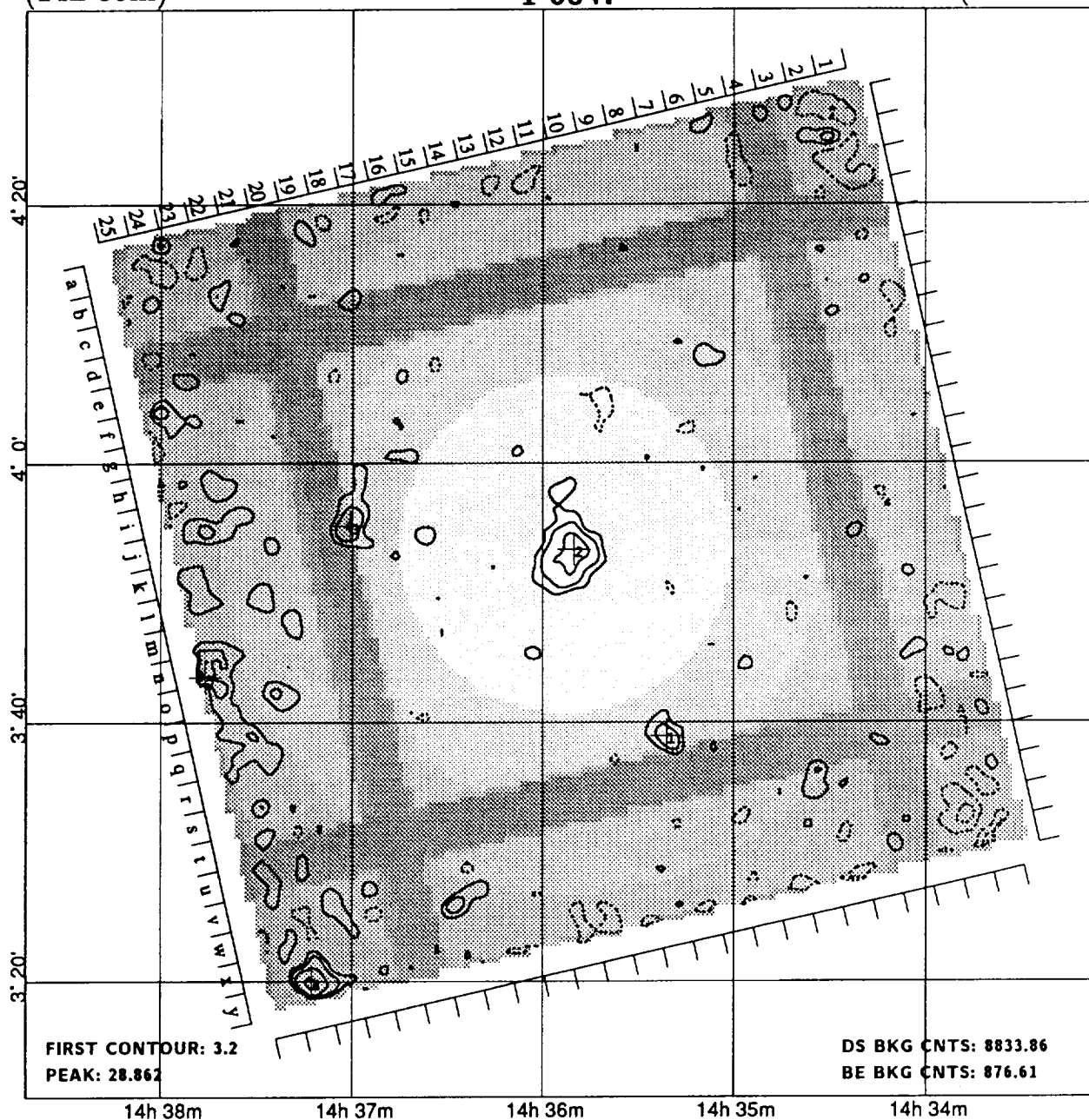
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3305	1	14 35 37.7	-06 45 22	31	0.157	0.010	241.5	6.5	15.3	1.2	0	0.2	H	Q



(14h 35m)

I 6847

(14h 35m)



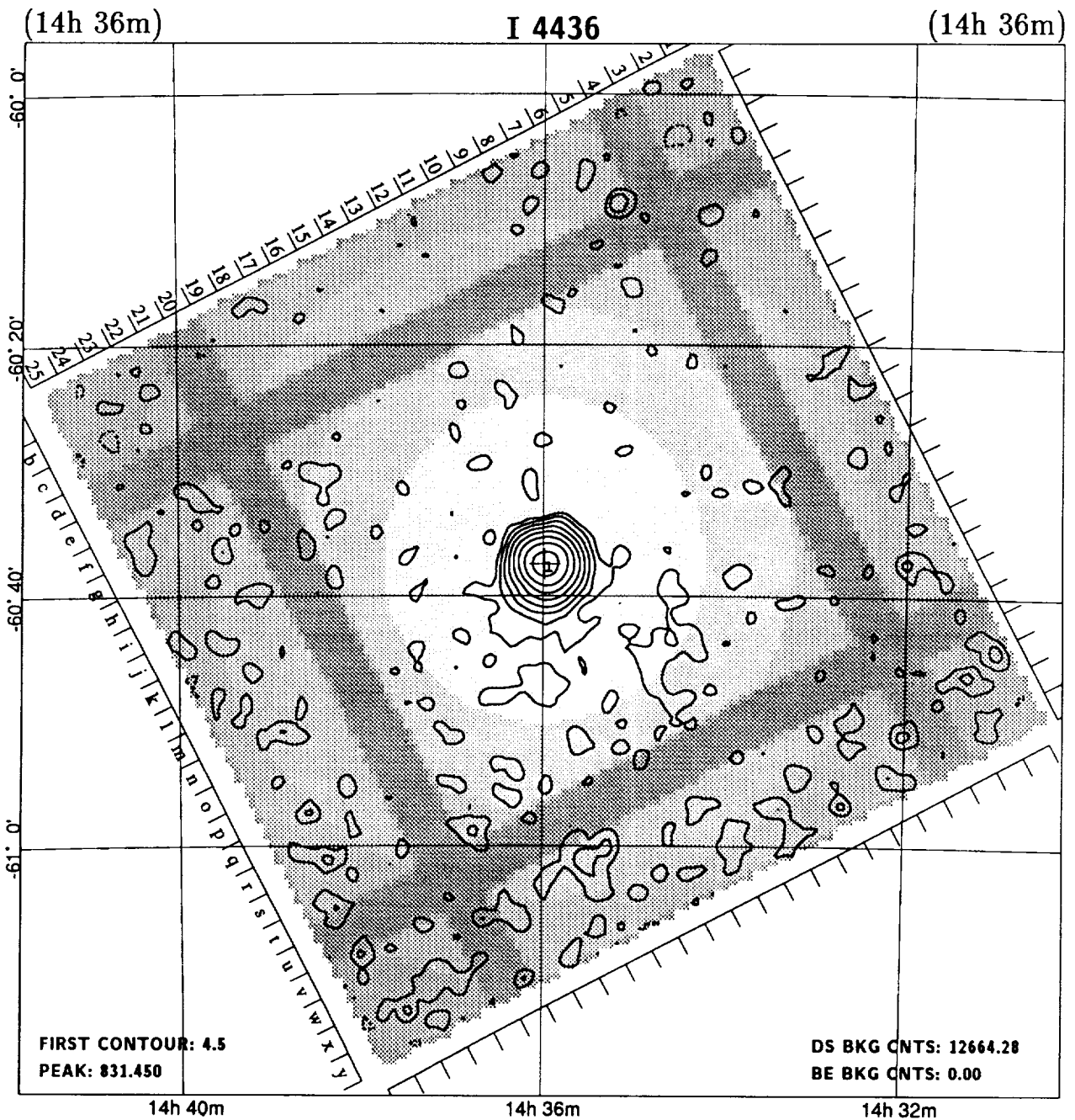
## A1942.OBSERVATIONS OF BUTCHER-OEMLER CLUSTERS

FIELD CENTER:  $14^{\text{h}}35^{\text{m}}54.0^{\text{s}}$   $03^{\circ}52'59''$  (B1950)  
 $14^{\text{h}}38^{\text{m}}24.9^{\text{s}}$   $03^{\circ}40'04''$  (J2000)  
 $l: 355.05$   $b: 55.32$

DATE: 1980/220 - 1980/220  
 LIVETIME: 7158.3s  
 ROLL ANGLE:  $77.3^{\circ}$

NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3303	1	14 35 21.0	03 38 57	51	*0.0086	0.0018	34.6	19.4	4.7	0.9	601	16.6	H	
3307	2	14 35 50.1	03 53 20	34	0.0149	0.0019	79.5	22.5	7.9	2.0	0	1.0	AH	
3310	3	14 37 00.7	03 55 12	51	*0.0103	0.0019	41.3	14.7	5.5	1.2	806	16.8	H	
3311	4	14 37 12.8	03 19 59	52	0.0215	0.0046	30.8	12.2	4.7	1.0	500	38.5	EH	
3314	5	14 37 46.0	03 43 29	56	*0.0130	0.0034	20.7	9.3	3.8	4.1	906	29.7	EH	



STELLAR SURVEY: ALPHA CEN

FIELD CENTER:  $14^{\text{h}}36^{\text{m}}00.0^{\text{s}}$   $-60^{\circ}37'59''$  (B1950)  
 $14^{\text{h}}39^{\text{m}}49.6^{\text{s}}$   $-60^{\circ}50'53''$  (J2000)  
 $l: 315.75$   $b: -0.70$

DATE: 1979/238 - 1979/238  
 LIVETIME: 10262.2s  
 ROLL ANGLE:  $62.6^{\circ}$

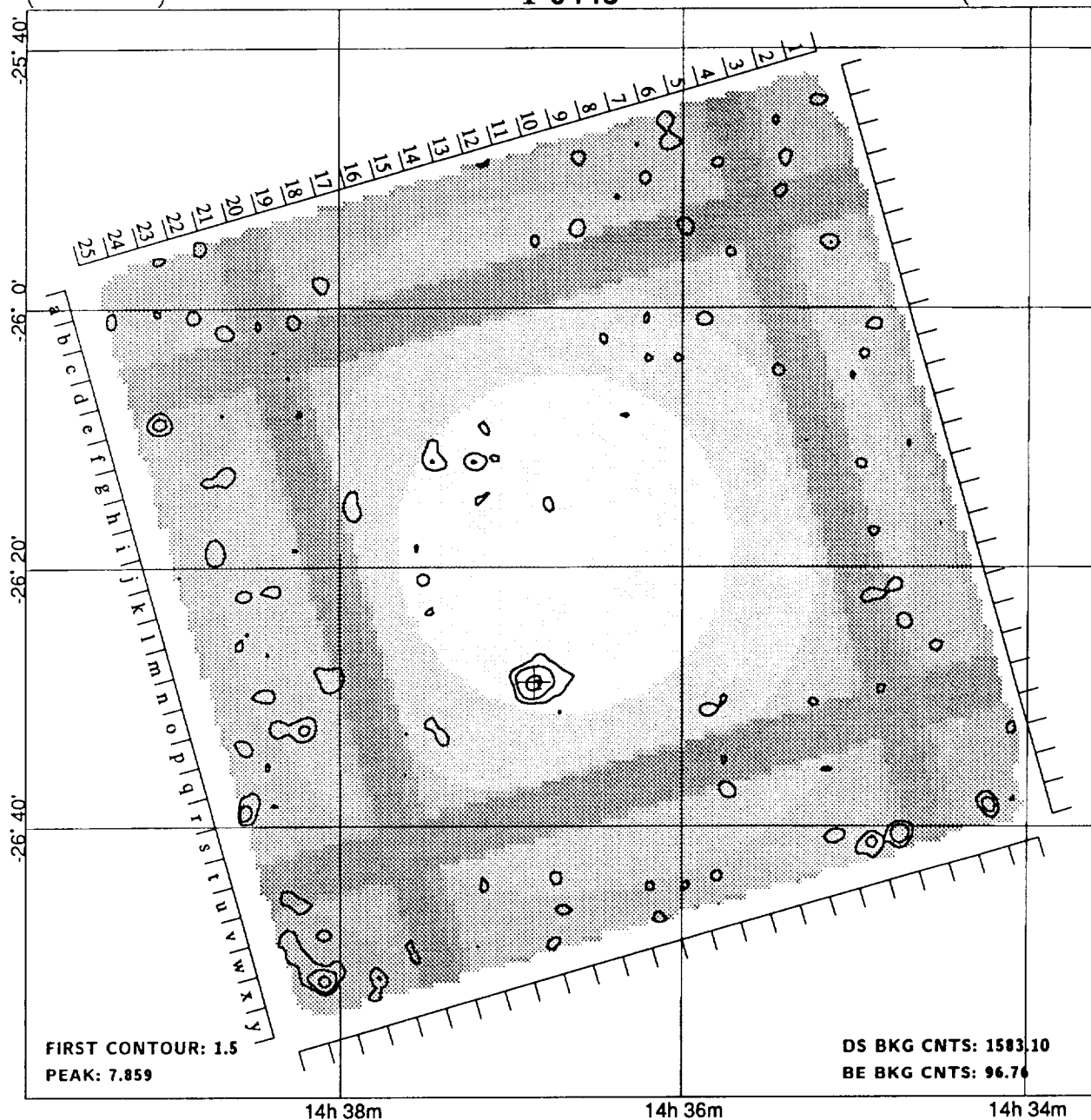
NH:  $1.2\text{E}+21$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3308	1L	14 35 58.9	-60 37 27	31	0.4001	0.0098	3060.4	1069.6	40.5	1.7	0	0.5		S

(14h 36m)

I 6443

(14h 36m)



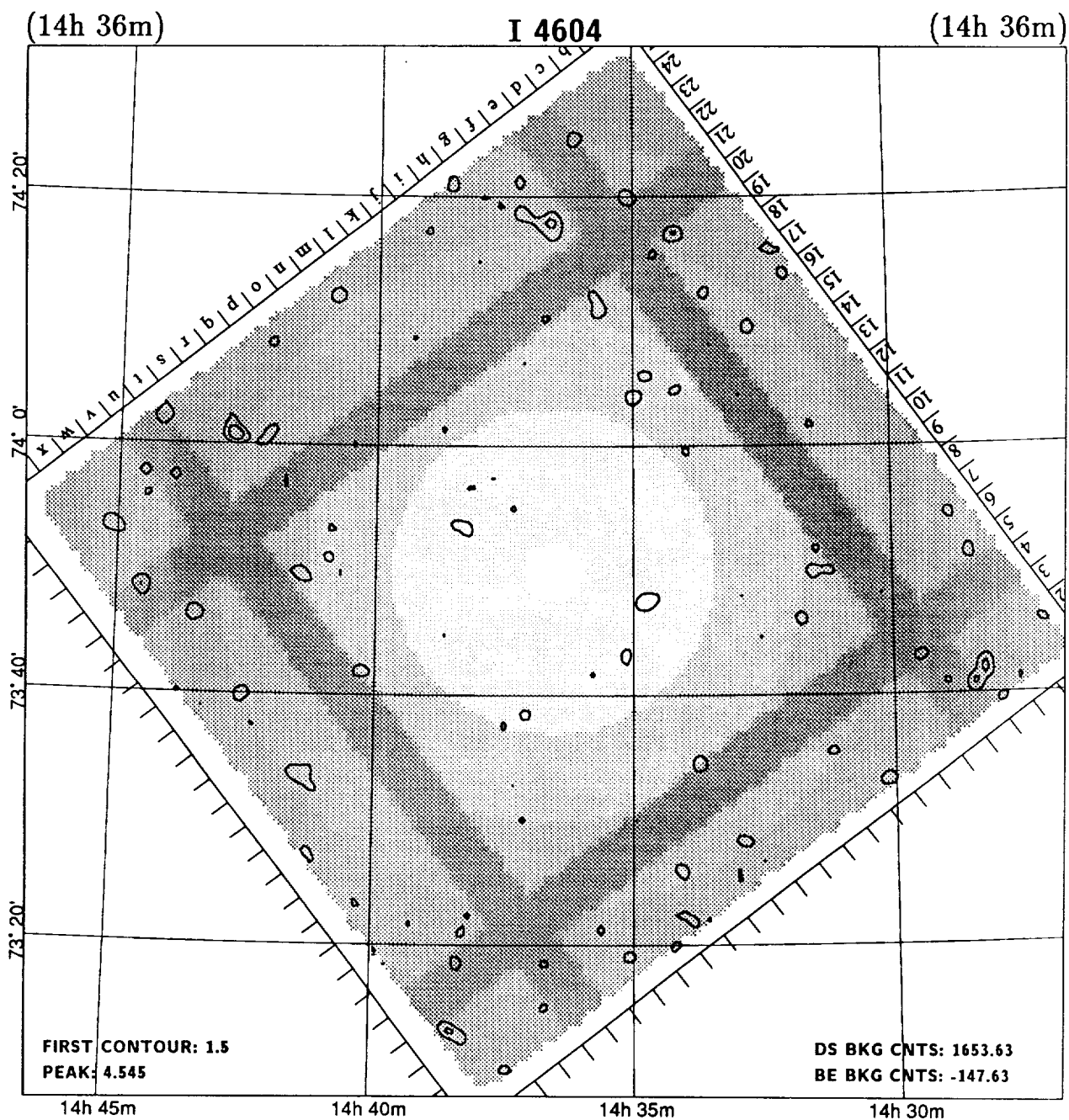
## NGC 5694, GLOBULAR CLUSTER SURVEY

FIELD CENTER:  $14^{\text{h}}36^{\text{m}}42.0^{\text{s}}$   $-26^{\circ}18'59''$  (B1950)  
 $14^{\text{h}}39^{\text{m}}36.9^{\text{s}}$   $-26^{\circ}31'52''$  (J2000)  
 $l: 331.06$   $b: 30.37$

DATE: 1980/206 - 1980/206  
 LIVETIME: 1282.8s  
 ROLL ANGLE:  $74.2^{\circ}$

NH:  $7.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3309	1	14 36 51.8	-26 28 54	42	0.0336	0.0067	28.3	3.7	5.0	1.2	0	9.9	H	

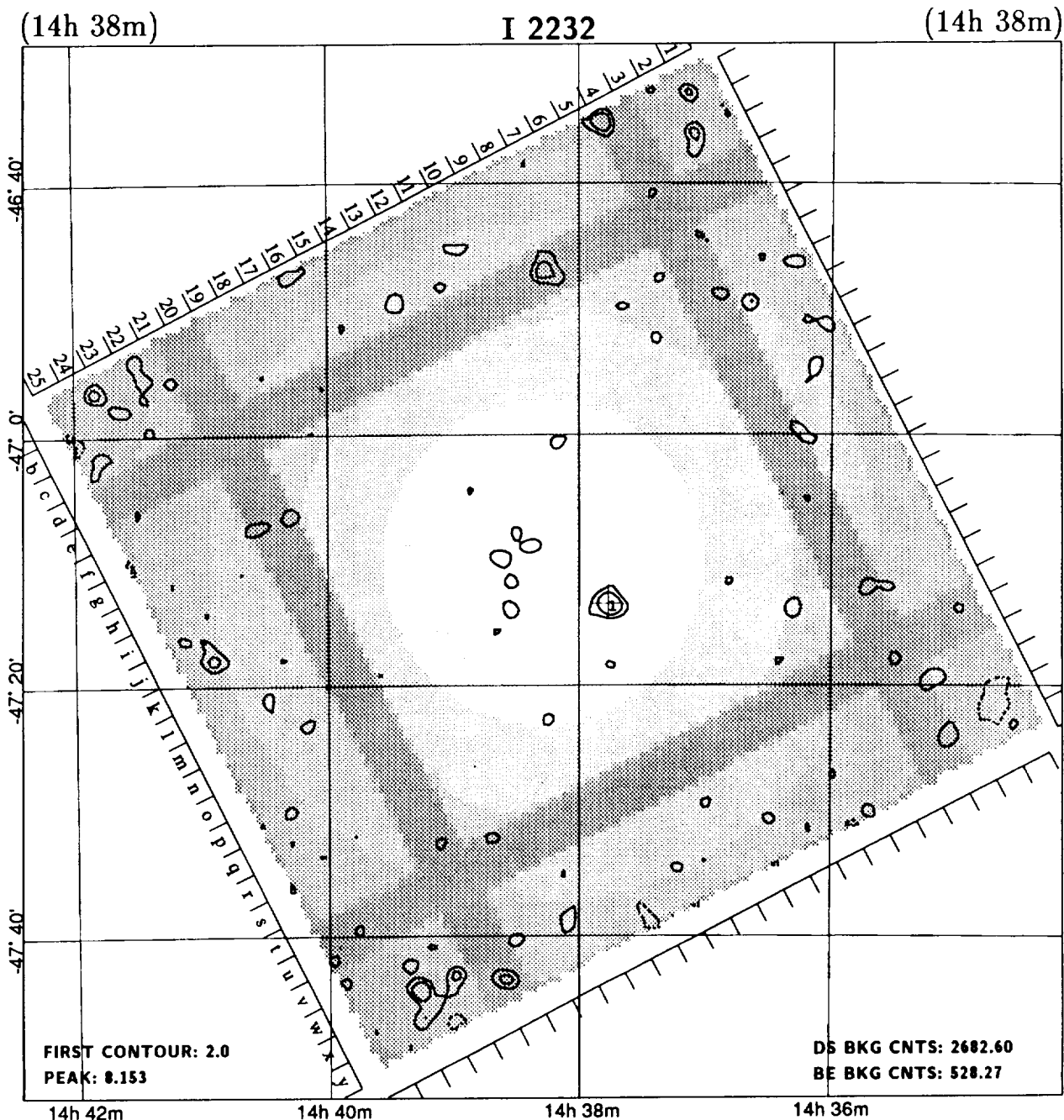


**MKN 287: S-TYPE MARKARIAN GALAXY**

FIELD CENTER:  $14^{\text{h}}36^{\text{m}}42.0^{\text{s}}$   $73^{\circ}49'59''$  (B1950)  
 $14^{\text{h}}36^{\text{m}}51.1^{\text{s}}$   $73^{\circ}37'03''$  (J2000)  
 $l$ : 113.31  $b$ : 41.48

DATE: 1979/269 - 1979/269  
 LIVETIME: 1340.0s  
 ROLL ANGLE: 142.7°

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



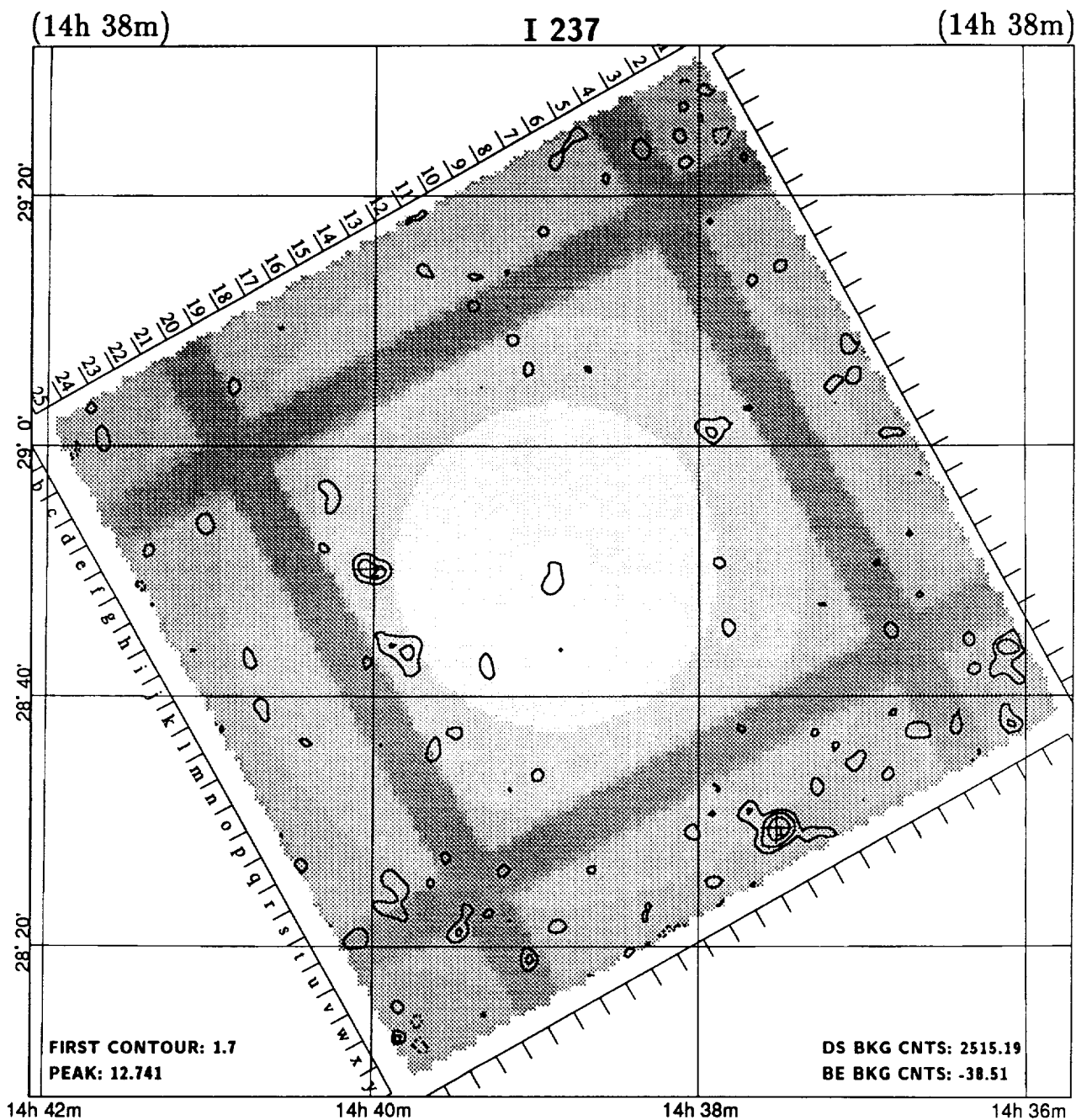
STELLAR SURVEY-EARLY TYPE STARS: HD129056=ALPHA LUP

FIELD CENTER:  $14^{\text{h}}38^{\text{m}}18.0^{\text{s}}$   $-47^{\circ}10'59''$  (B1950)  
 $14^{\text{h}}41^{\text{m}}38.3^{\text{s}}$   $-47^{\circ}23'47''$  (J2000)  
 $l: 321.56$   $b: 11.45$

DATE: 1979/240 - 1979/240  
 LIVETIME: 2173.8s  
 ROLL ANGLE:  $62.9^{\circ}$

NH:  $1.6\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3313	1	14 37 46.0	-47 13 32	42	0.0177	0.0039	27.1	8.9	4.5	0.8	0	5.8	H	S



**A 1952 CLUSTER EVOLUTION**

FIELD CENTER:  $14^{\text{h}}38^{\text{m}}54.0^{\text{s}}$   $28^{\circ}49'59''$  (B1950)  
 $14^{\text{h}}41^{\text{m}}04.2^{\text{s}}$   $28^{\circ}37'12''$  (J2000)  
 $l: 42.89$   $b: 65.78$

DATE: 1979/191 - 1979/191  
 LIVETIME: 2038.1s  
 ROLL ANGLE:  $60.7^{\circ}$

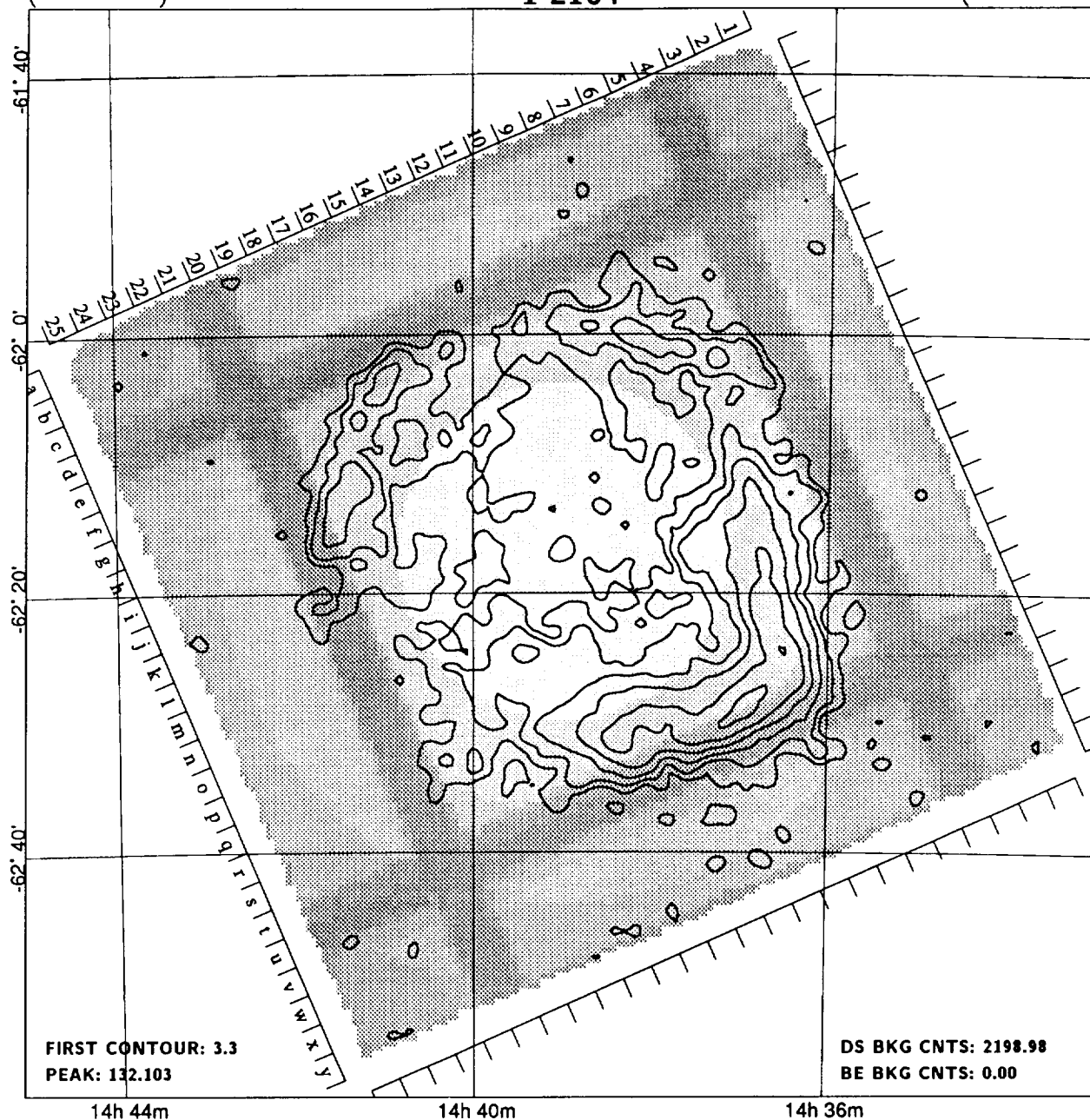
NH:  $1.7\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3312	1	14 37 31.4	28 29 26	51	0.0285	0.0065	22.7	4.3	4.4	1.2	0	27.2	H	
3317	2	14 40 01.4	28 50 14	46	0.0150	0.0040	18.0	5.0	3.7	0.8	0	14.8	H	

(14h 39m)

I 2164

(14h 39m)



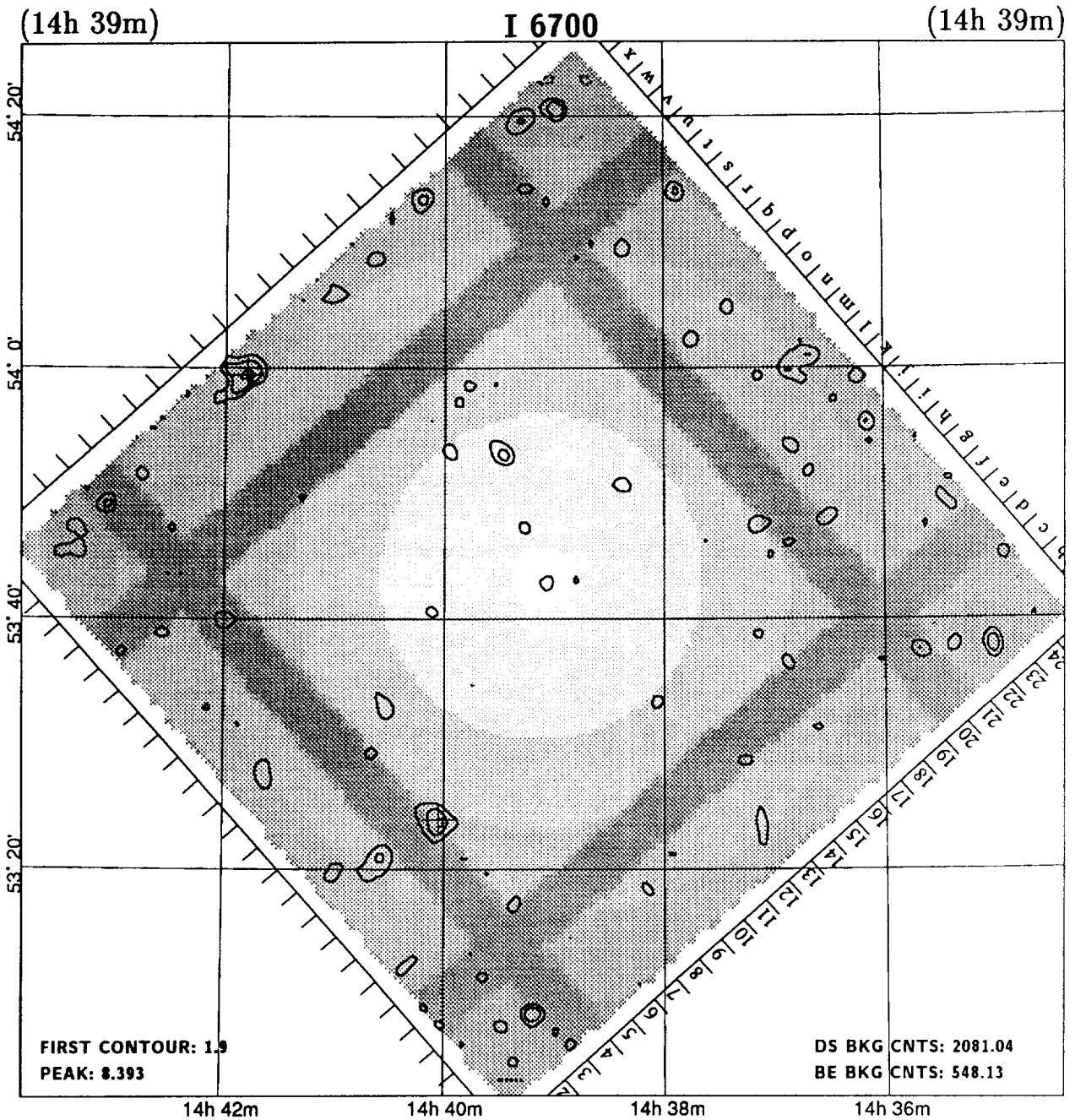
## X-RAY STUDY OF SUPERNOVA REMNANTS: G315.4-2.3=RCW86=MSH14-63

FIELD CENTER:  $14^{\text{h}}39^{\text{m}}00.0^{\text{s}}$   $-62^{\circ}16'59''$  (B1950)  
 $14^{\text{h}}42^{\text{m}}56.3^{\text{s}}$   $-62^{\circ}29'44''$  (J2000)  
 $l: 315.41$   $b: -2.36$

DATE: 1979/238 - 1979/238  
 LIVETIME: 1781.9s  
 ROLL ANGLE:  $66.4^{\circ}$

NH:  $1.2\text{E}+21$   
 REF/ID: SNR  
 FIELD FLAGS: DLS





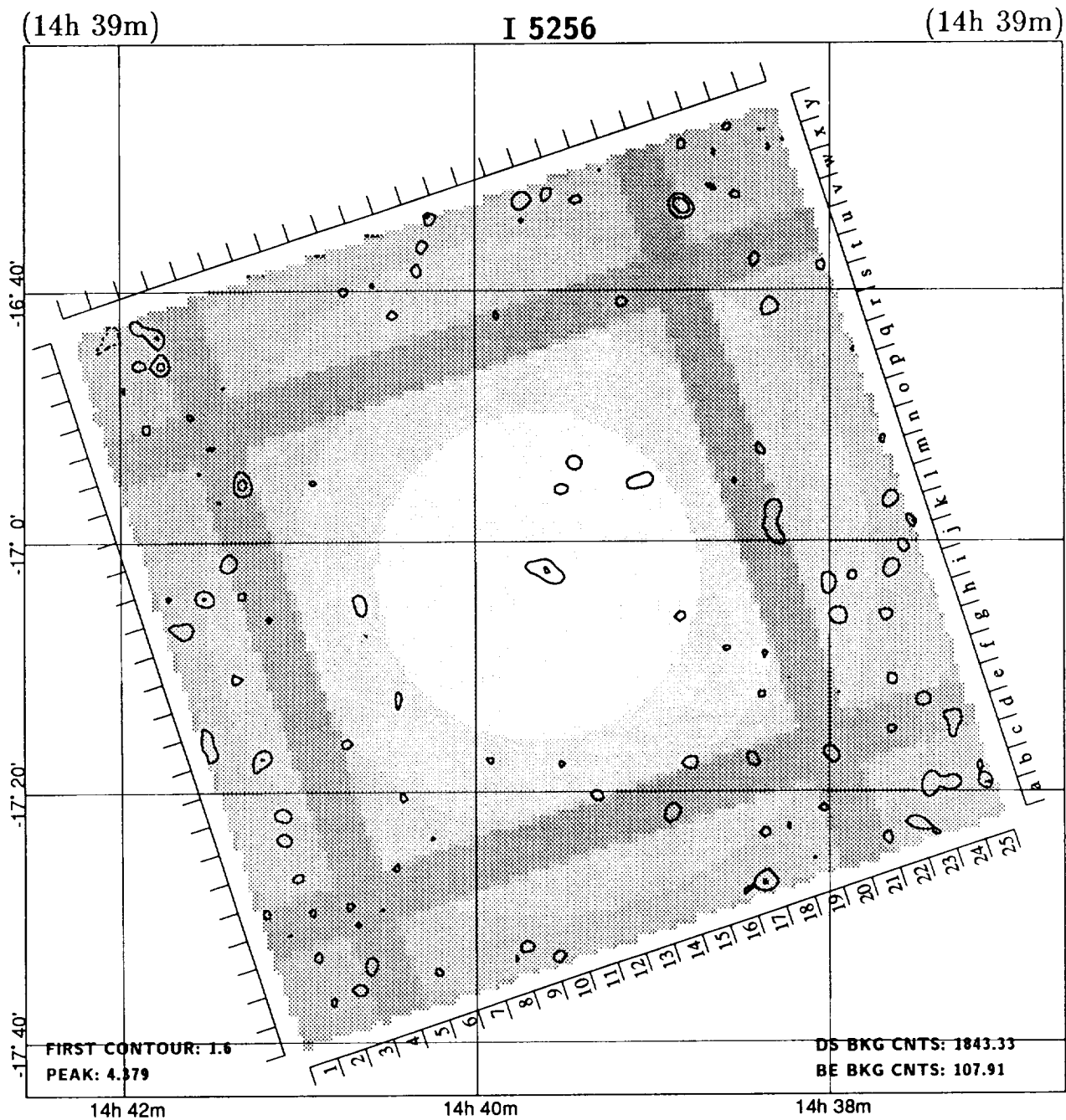
SEYFERT SURVEY: I ZW 92

FIELD CENTER:  $14^h 39^m 06.0^s$   $53^\circ 43' 59''$  (B1950)  
 $14^h 40^m 41.5^s$   $53^\circ 31' 12''$  (J2000)  
 $l: 93.05$   $b: 56.80$

DATE: 1980/ 2 - 1980/ 2  
 LIVETIME: 1686.3s  
 ROLL ANGLE:  $-131.4^\circ$

NH:  $1.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3318	1	14 40 02.9	53 23 57	55	*0.0205	0.0055	17.0	4.0	3.7	0.9	703	21.7	H	
3324	2	14 41 48.2	53 59 27	55	0.0260	0.0074	16.1	4.9	3.5	1.1	100	28.5	H	



NGC 5728, X-RAY AND OPTICAL STUDY OF NEARBY SEYFERT 2 GALAXIES

FIELD CENTER:  $14^{\text{h}}39^{\text{m}}37.0^{\text{s}}$   $-17^{\circ}02'17''$  (B1950)  
 $14^{\text{h}}42^{\text{m}}24.1^{\text{s}}$   $-17^{\circ}15'02''$  (J2000)  
 $l$ : 337.33  $b$ : 38.10

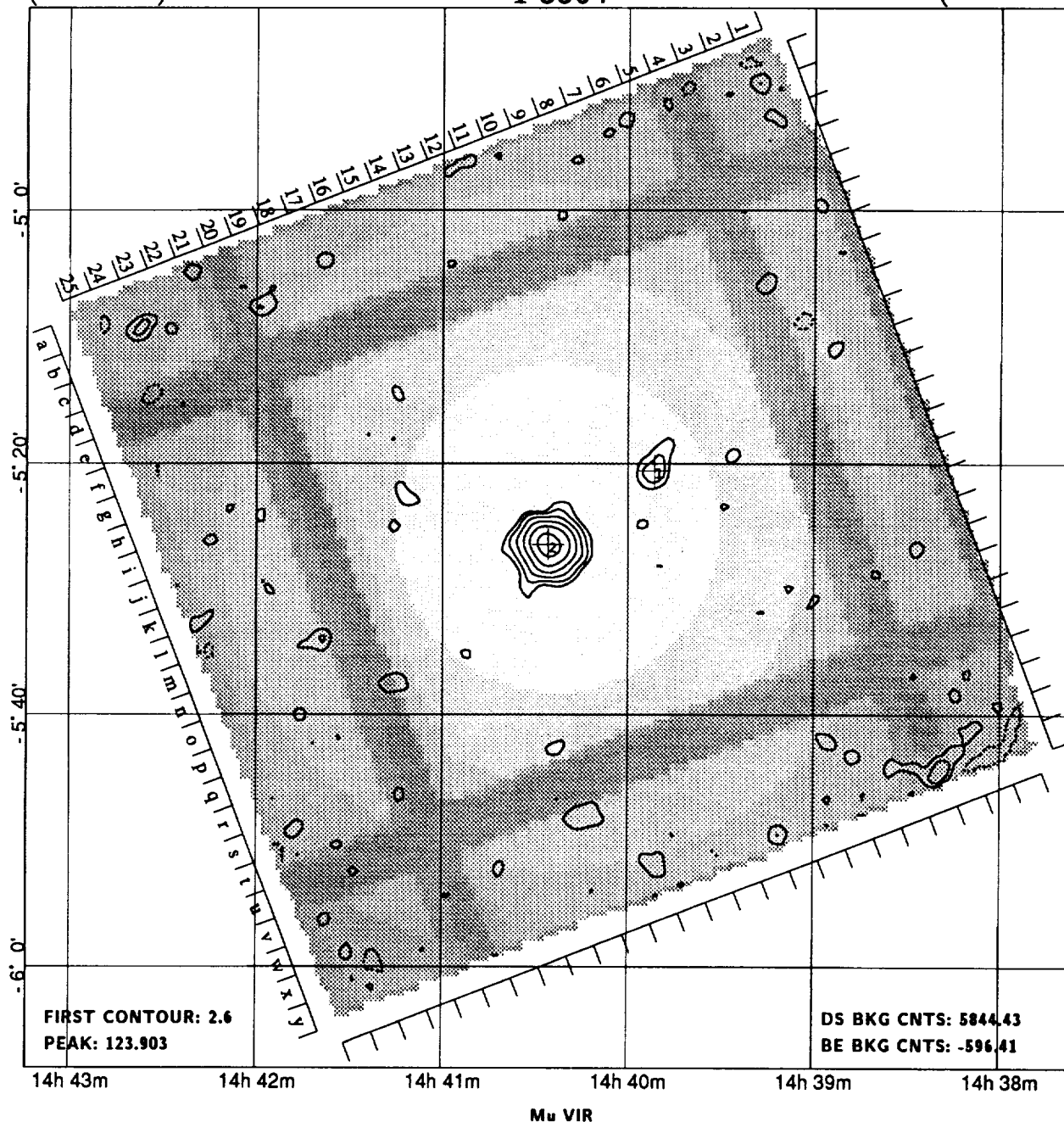
DATE: 1980/ 48 - 1980/ 48  
 LIVETIME: 1493.7s  
 ROLL ANGLE:  $-108.2^{\circ}$

NH:  $7.4\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS:

(14h 40m)

I 5564

(14h 40m)



FIELD CENTER:  $14^h 40^m 25.0^s$   $-05^\circ 25' 59''$  (B1950)  
 $14^h 43^m 02.9^s$   $-05^\circ 38' 42''$  (J2000)  
 $l: 346.56$   $b: 47.55$

DATE: 1980/216 - 1980/216

NH: 5.5E+20

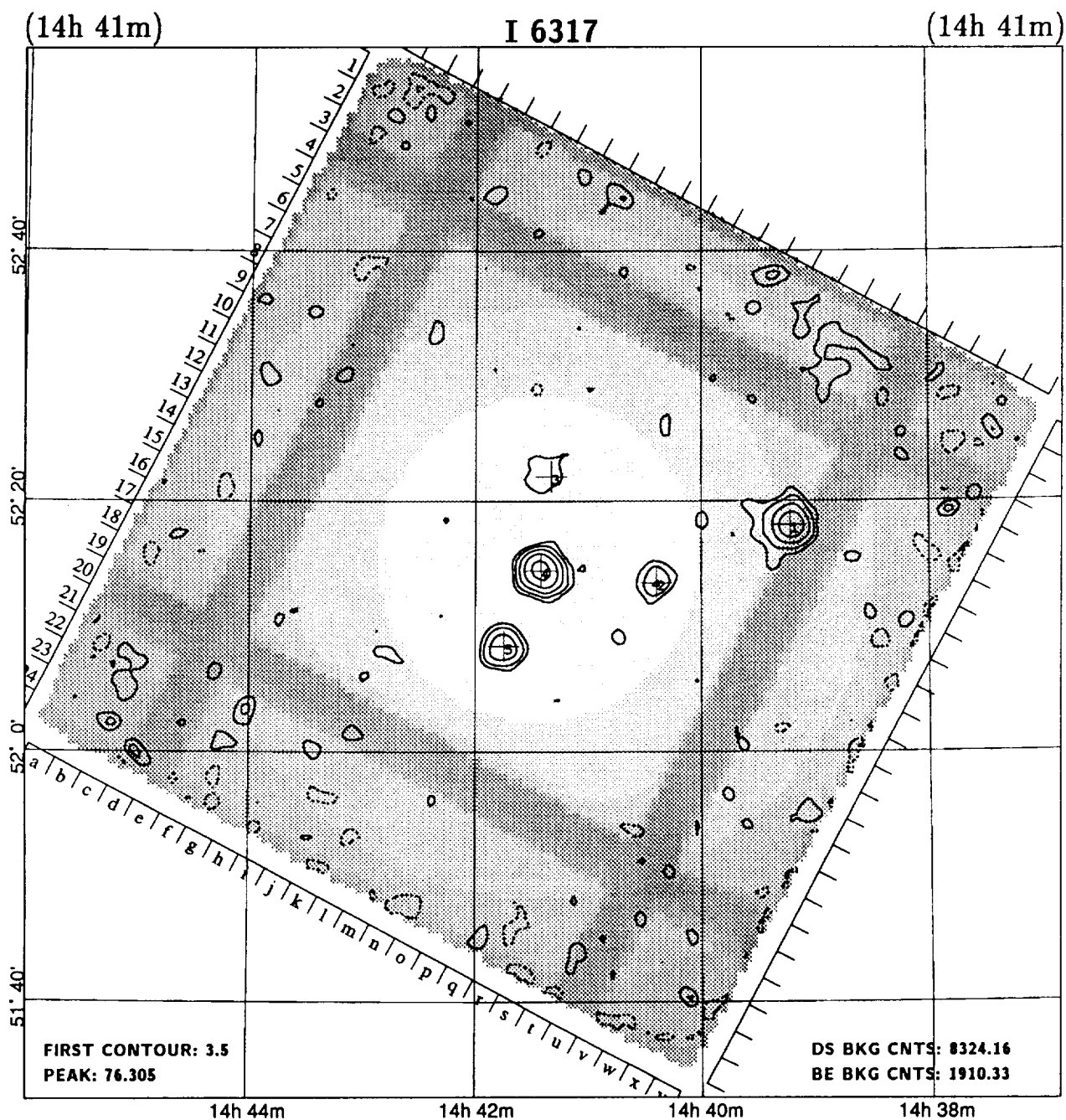
LIVETIME: 4735.9s

REF/ID:

ROLL ANGLE: 69.0°

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3316	1	14 39 51.4	-05 20 33	42	0.0098	0.0020	31.2	11.8	4.8	1.1	0	10.4	H	AGN
3320	2	14 40 25.9	-05 26 30	31	0.1545	0.0067	542.3	12.7	23.0	1.5	0	0.6	H	



3CR 303, 3CR RADIO GAL. W/SEYFERT-LIKE OPT. SPECTRA

FIELD CENTER: 14<sup>h</sup>41<sup>m</sup>24.7<sup>s</sup> 52°14'20" (B1950)  
 14<sup>h</sup>43<sup>m</sup>02.6<sup>s</sup> 52°01'38" (J2000)  
 $\ell$ : 90.53  $b$ : 57.50

DATE: 1980/154 - 1980/154  
 LIVETIME: 6745.4s  
 ROLL ANGLE: 27.9°

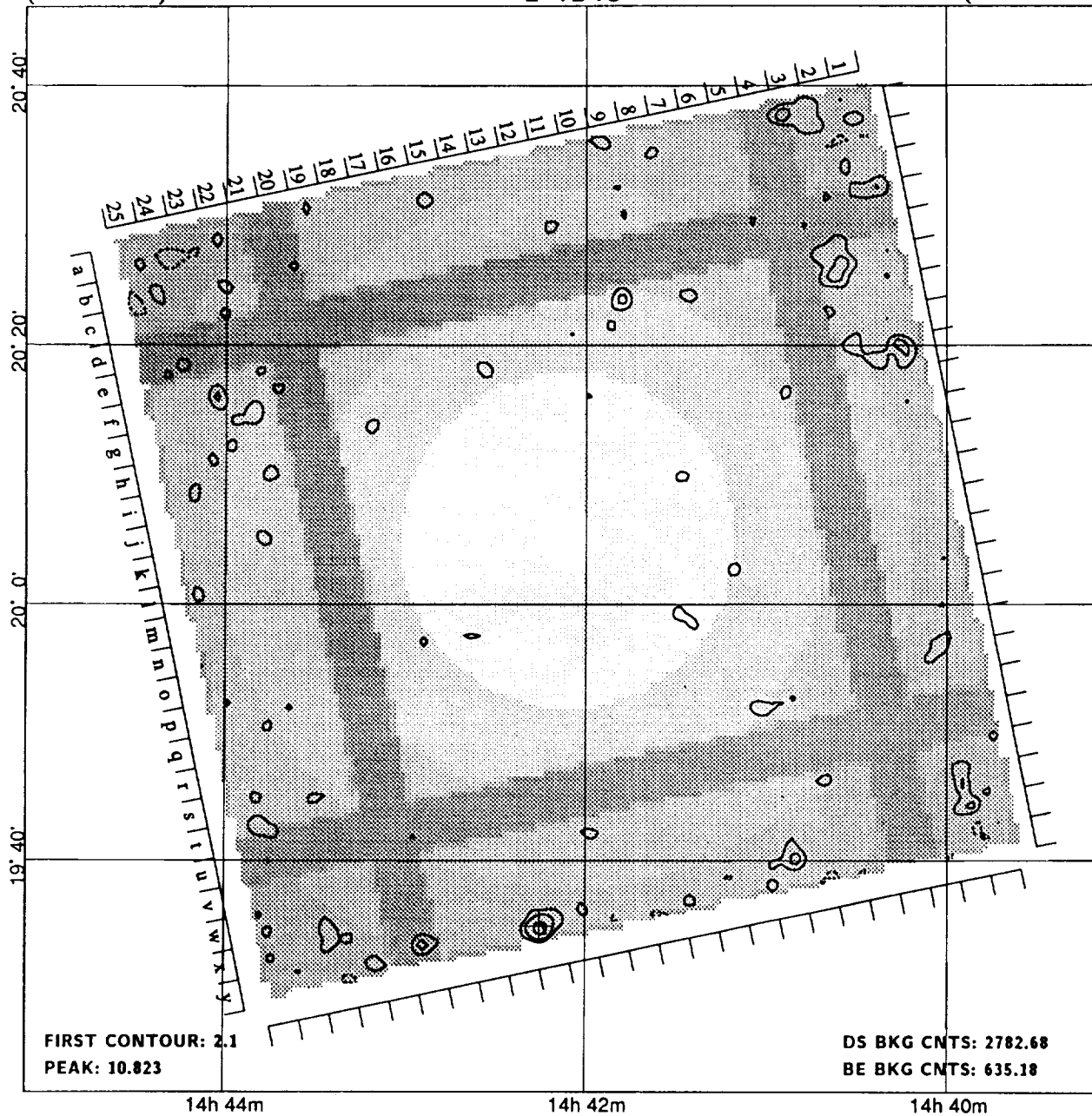
NH: 1.6E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3315	1	14 39 13.0	52 18 05	48	*0.0419	0.0037	141.7	18.3	11.2	1.3	703	20.5	H	
3319	2	14 40 23.7	52 13 30	41	0.0099	0.0019	44.8	25.2	5.4	0.9	0	9.2	H	
3321	3	14 41 19.7	52 21 58	46	0.0060	0.0016	28.5	26.5	3.8	0.9	0	7.9	H	
3322	4	14 41 25.2	52 14 27	31	0.0664	0.0038	333.2	26.8	17.6	1.2	0	0.4	H	G
3323	5	14 41 44.7	52 08 27	38	0.0208	0.0024	97.1	23.9	8.8	1.0	0	6.5	H	

(14h 42m)

I 4148

(14h 42m)



FIELD CENTER: 14<sup>h</sup>42<sup>m</sup>07.2<sup>s</sup> 20°04'11" (B1950)  
14<sup>h</sup>44<sup>m</sup>25.1<sup>s</sup> 19°51'33" (J2000)  
l: 23.31 b: 63.16

DATE: 1980/223 - 1980/223  
LIVETIME: 2254.9s  
ROLL ANGLE: 78.3°

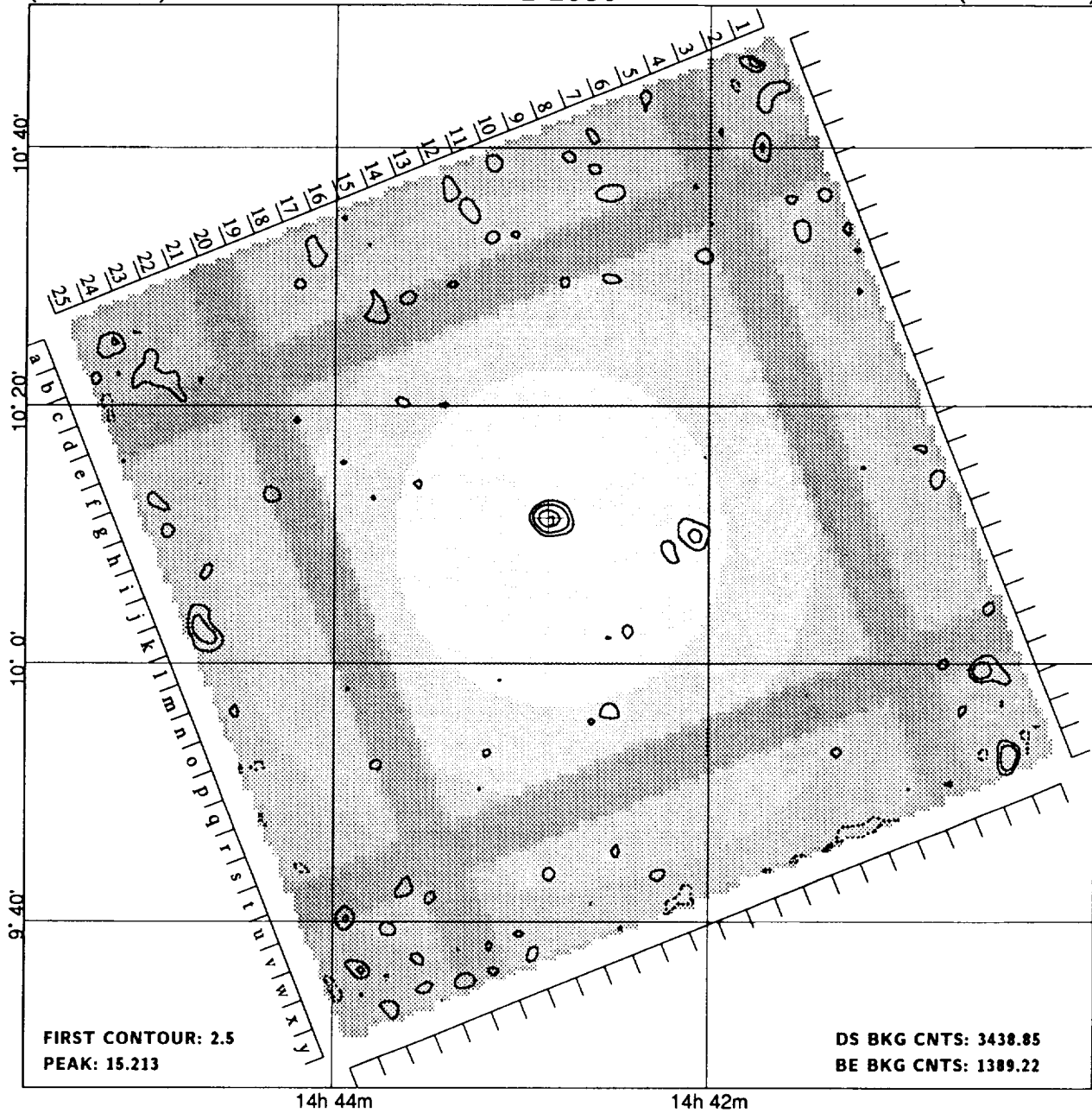
NH: 2.3E+20  
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3325	1	14 42 15.3	19 34 56	55	0.0218	0.0061	17.3	5.7	3.6	0.8	600	29.3	H	

(14h 42m)

I 2050

(14h 42m)



## X-RAY STUDY OF QUASARS: OQ 172

FIELD CENTER:  $14^{\text{h}}42^{\text{m}}48.0^{\text{s}}$   $10^{\circ}08'59''$  (B1950)  
 $14^{\text{h}}45^{\text{m}}14.0^{\text{s}}$   $09^{\circ}56'23''$  (J2000)  
 $l: 5.72$   $b: 58.16$

DATE: 1979/203 - 1979/203  
 LIVETIME: 2786.6s  
 ROLL ANGLE:  $68.2^{\circ}$

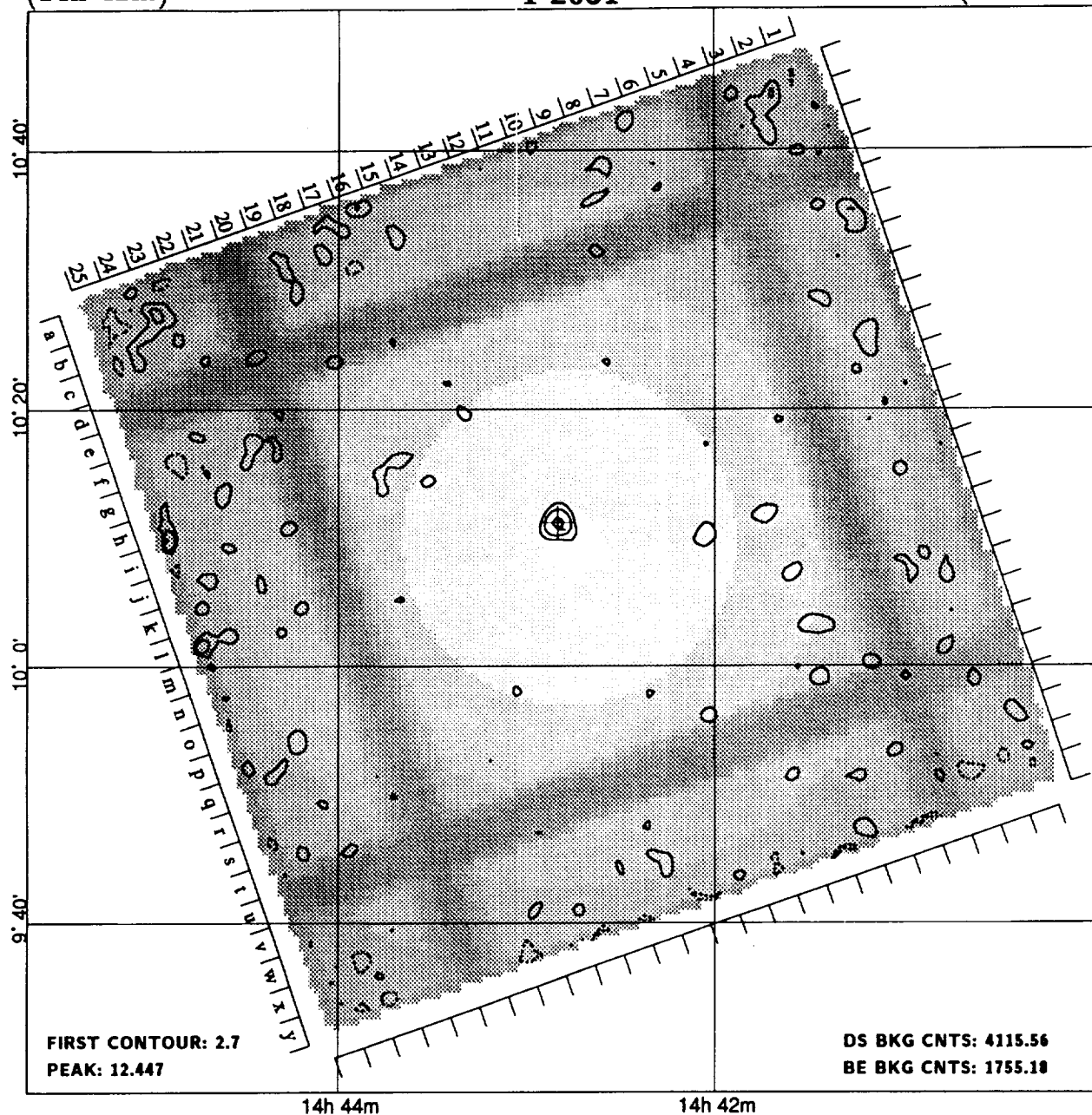
NH:  $1.7\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3326	1L	14 42 51.4	10 11 18	35	0.0278	0.0046	57.1	10.9	5.9	0.9	0	2.5	A	Q

(14h 42m)

I 2051

(14h 42m)



## X-RAY STUDY OF QUASARS: OQ 172

FIELD CENTER:  $14^h 42^m 48.0^s$   $10^\circ 08' 59''$  (B1950)  
 $14^h 45^m 14.0^s$   $09^\circ 56' 23''$  (J2000)  
 $l: 5.72$   $b: 58.16$

DATE: 1979/210 - 1979/210  
 LIVETIME: 3335.0s  
 ROLL ANGLE:  $71.0^\circ$

NH:  $1.7E+20$   
 REF/ID: !  
 FIELD FLAGS: CL

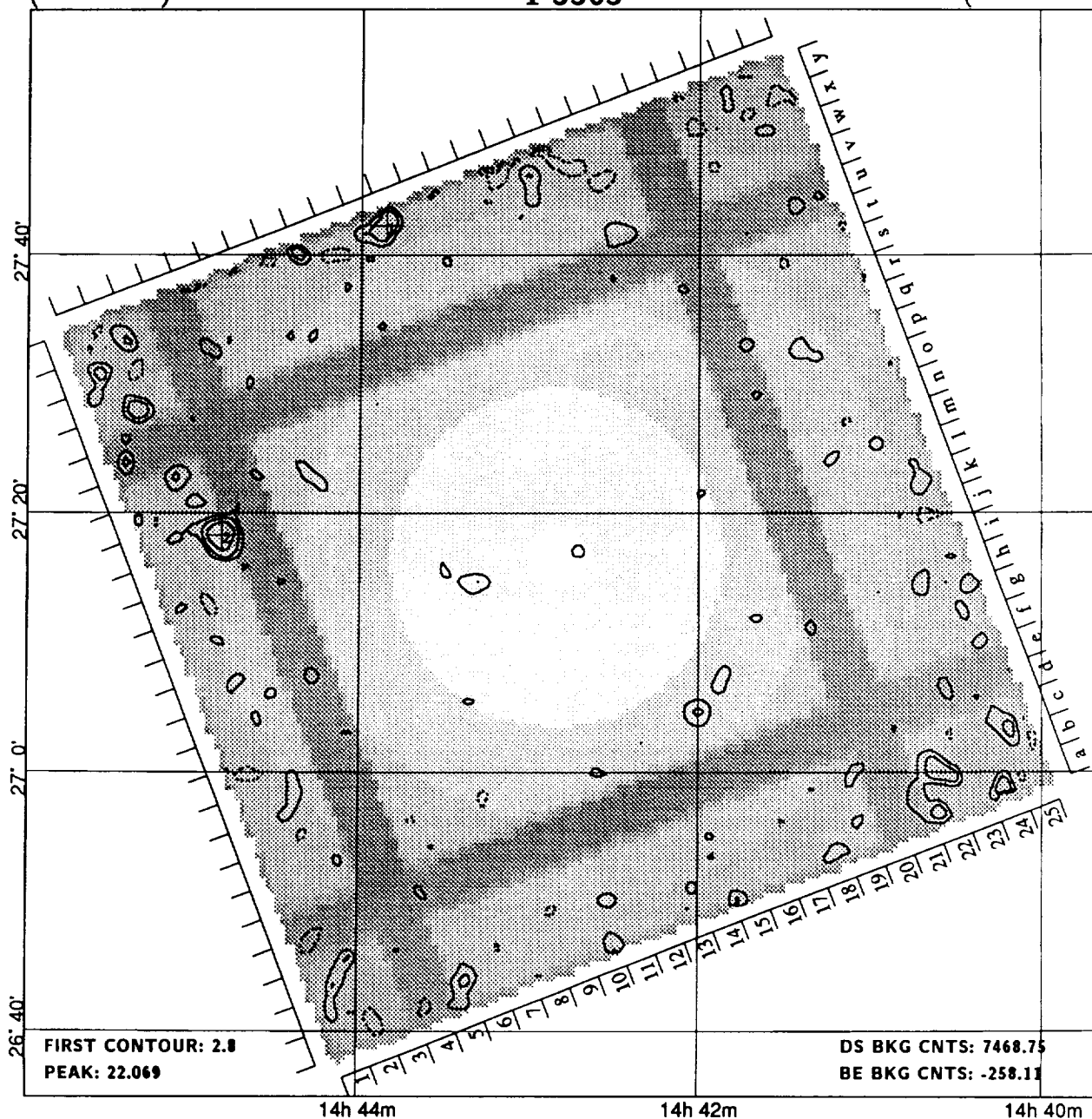
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3326	1L	14 42 50.1	10 11 13	35	0.0178	0.0037	44.0	17.0	4.7	0.8	0	2.3	A	Q



(14h 42m)

I 5565

(14h 42m)



Epsil. BOO

FIELD CENTER:  $14^{\text{h}}42^{\text{m}}48.0^{\text{s}}$   $27^{\circ}16'59''$  (B1950)  
 $14^{\text{h}}44^{\text{m}}59.2^{\text{s}}$   $27^{\circ}04'23''$  (J2000)  
 $l: 39.38$   $b: 64.78$

DATE: 1980/ 21 - 1980/ 22

NH: 2.3E+20

LIVETIME: 6052.2s

REF/ID:

ROLL ANGLE: -111.0°

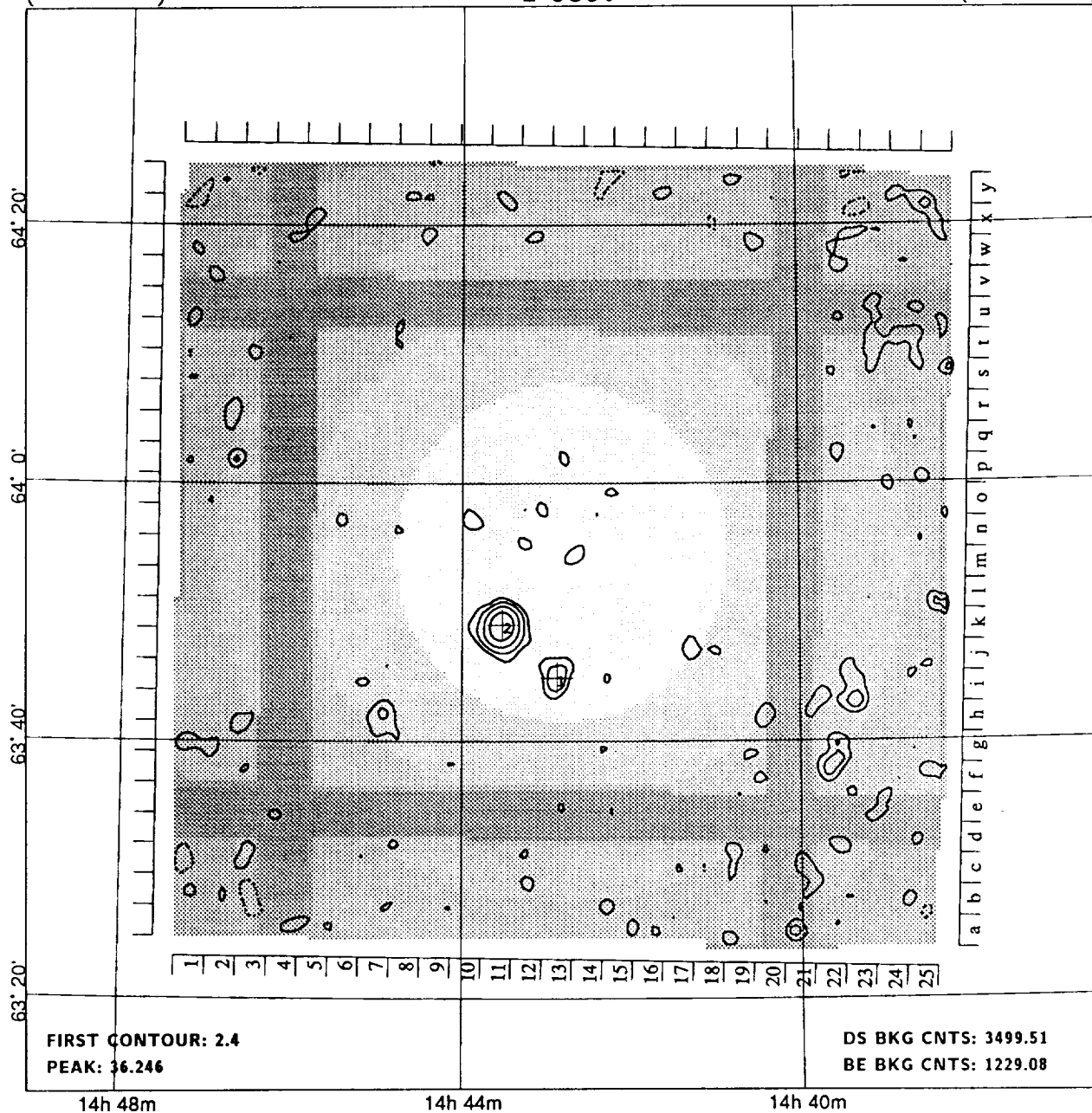
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3329	1	14 43 51.2	27 42 18	55	*0.0109	0.0029	22.2	11.8	3.8	0.9	602	29.1	H
3332	2	14 44 48.6	27 18 16	50	*0.0195	0.0031	48.3	10.7	6.3	1.0	704	26.9	H

(14h 42m)

I 6897

(14h 42m)



A1969, CLUSTER LUMINOSITIES @ Z=0.25.

**FIELD CENTER:** 14<sup>h</sup>42<sup>m</sup>48.0<sup>s</sup> 63°54'59" (B1950)  
 14<sup>h</sup>43<sup>m</sup>52.9<sup>s</sup> 63°42'21" (J2000)  
 $\ell$ : 104.32  $b$ : 49.16

**DATE:** 1981/ 40 - 1981/ 40  
**LIVETIME:** 2835.7s  
**ROLL ANGLE:** -89.1°

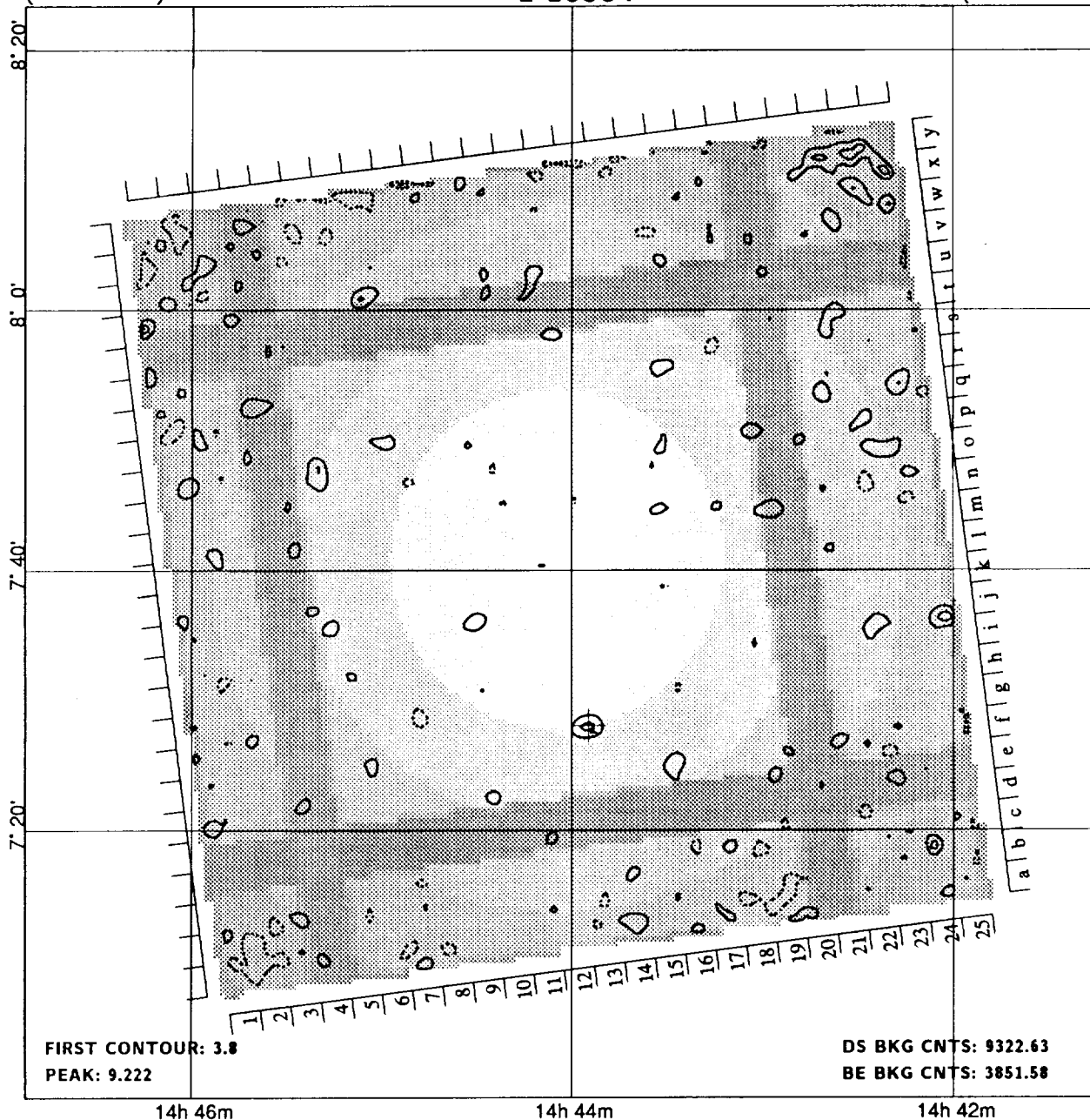
**NH:** 1.7E+20  
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3327	1	14 42 52.5	63 44 56	43	0.0154	0.0033	29.4	10.6	4.7	0.9	0	10.3	H	
3328	2	14 43 31.3	63 49 01	38	0.0710	0.0063	139.6	12.4	11.3	1.1	0	7.8	H	

(14h 44m)

I 10384

(14h 44m)



## CLUSTERS W/STEEP SPECTRUM RADIO SOURCES: TARGET 12

FIELD CENTER:  $14^{\text{h}}44^{\text{m}}03.1^{\text{s}}$   $07^{\circ}41'21''$  (B1950)  
 $14^{\text{h}}46^{\text{m}}31.0^{\text{s}}$   $07^{\circ}28'49''$  (J2000)  
 $l: 2.49$   $b: 56.39$

DATE: 1981/ 54 - 1981/ 54  
 LIVETIME: 7554.4s  
 ROLL ANGLE:  $-97.3^{\circ}$

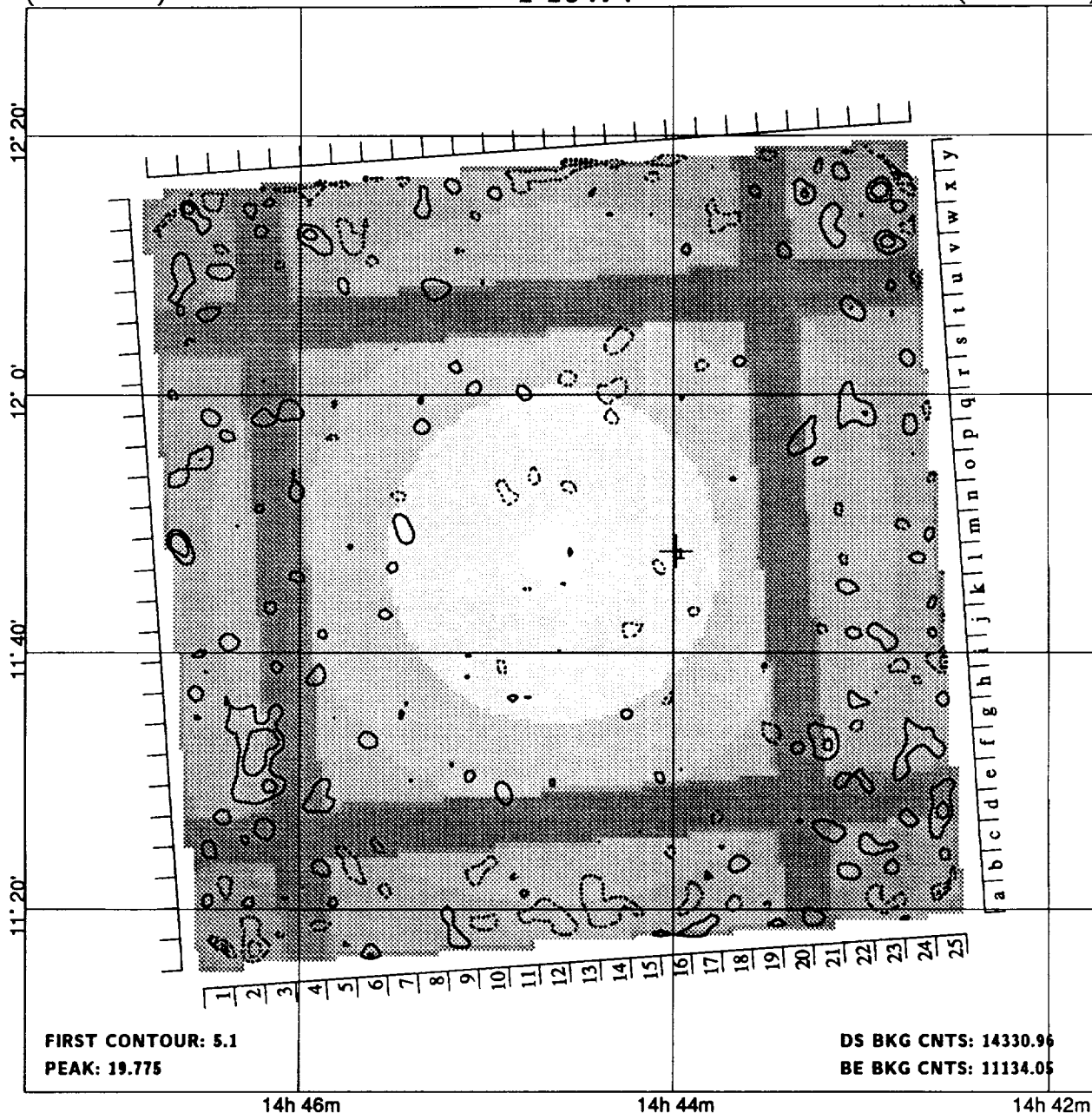
NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3330	1L	14 43 54.6	07 28 02	45	0.0073	0.0019	34.5	20.5	3.8	0.6	0	13.5		

(14h 44m)

I 10474

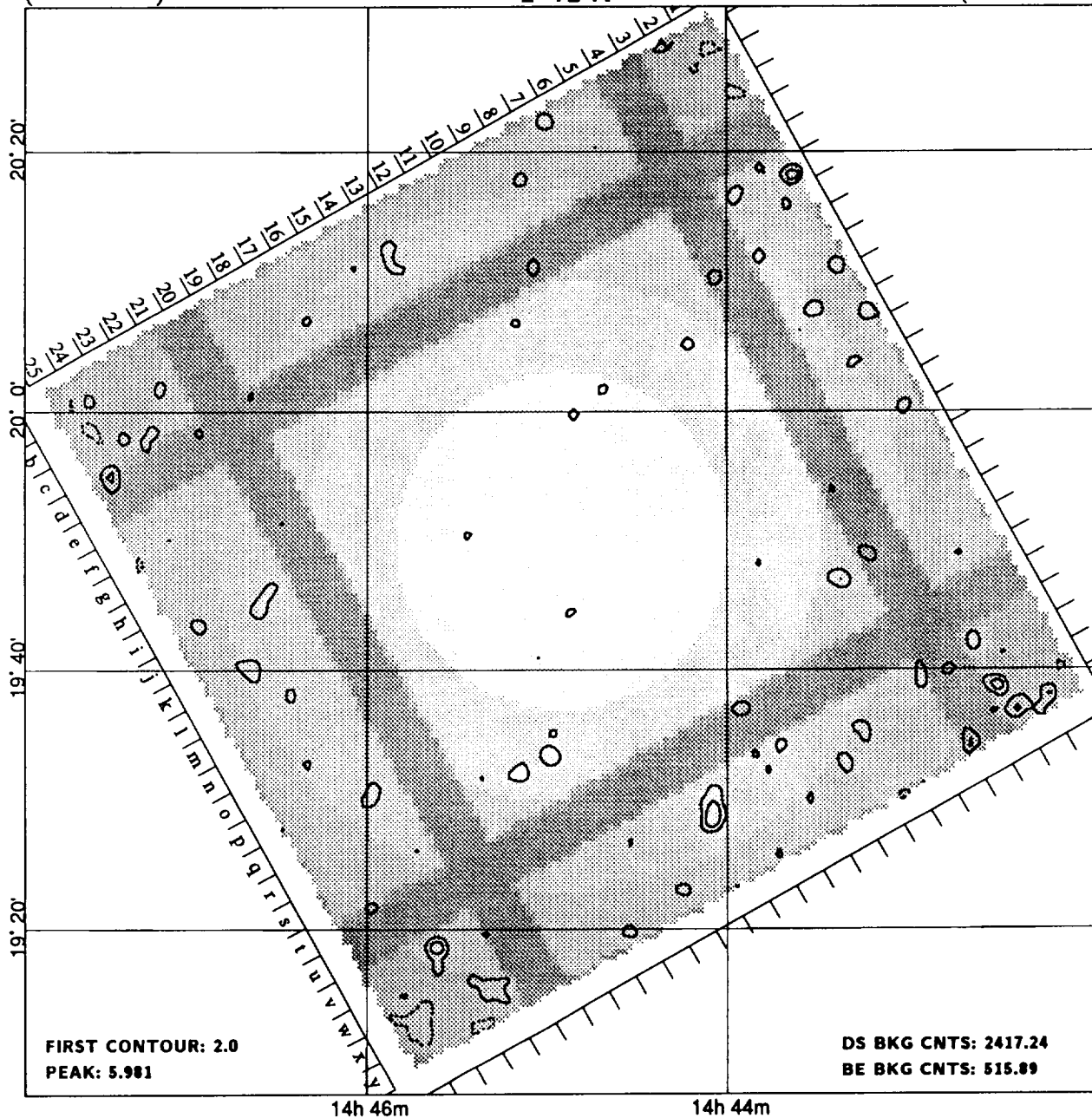
(14h 44m)



(14h 44m)

I 4147

(14h 44m)



H1444+19 POSITION

FIELD CENTER:  $14^{\text{h}}44^{\text{m}}55.2^{\text{s}}$   $19^{\circ}49'11''$  (B1950)  
 $14^{\text{h}}47^{\text{m}}13.1^{\text{s}}$   $19^{\circ}36'41''$  (J2000)  
 $l: 23.33$   $b: 62.46$

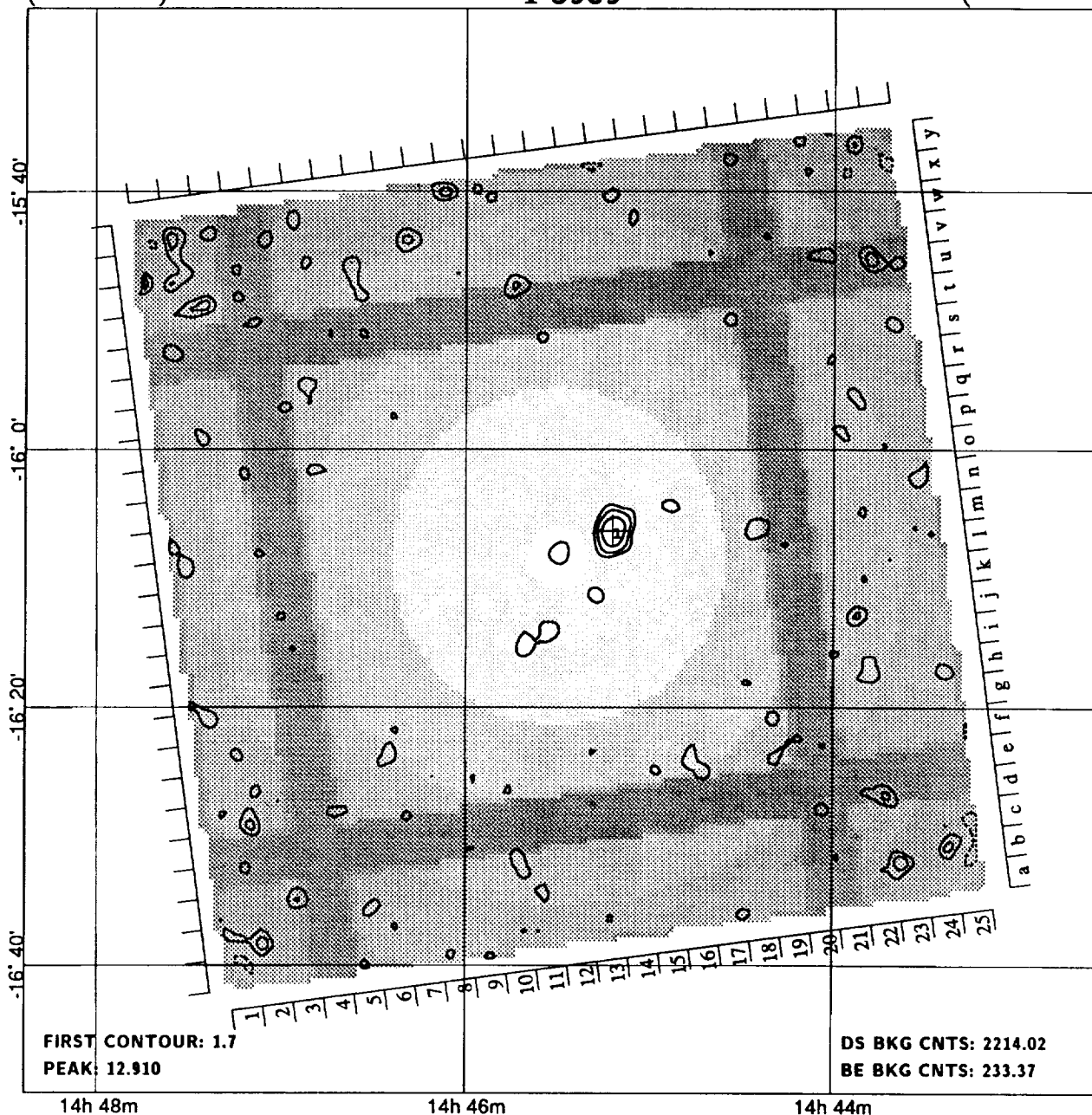
DATE: 1979/191 - 1979/191  
LIVETIME: 1958.8s  
ROLL ANGLE:  $60.9^{\circ}$

NH:  $2.3\text{E}+20$   
REF/ID:  
FIELD FLAGS:

(14h 45m)

I 3989

(14h 45m)



## 1445-161, OPTICALLY-QUIET COMPACT RADIO SOURCE

FIELD CENTER: 14<sup>h</sup>45<sup>m</sup>28.2<sup>s</sup> -16°07'52" (B1950)

DATE: 1980/ 44 - 1980/ 44

NH: 7.7E+20

14<sup>h</sup>48<sup>m</sup>14.9<sup>s</sup> -16°20'20" (J2000)

LIVETIME: 1794.1s

REF/ID:

 $\ell$ : 339.45  $b$ : 38.11

ROLL ANGLE: -97.5°

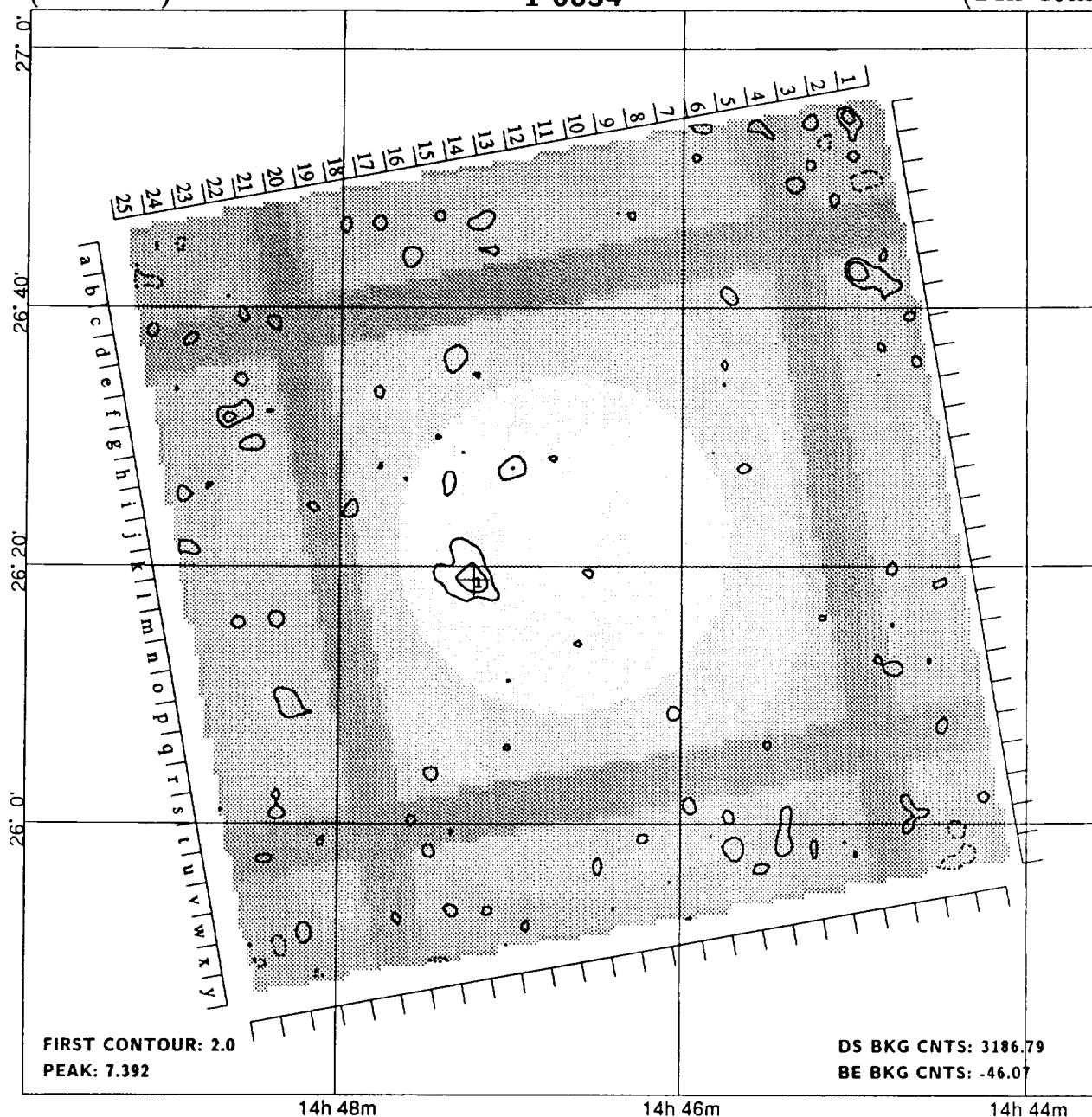
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3333	1	14 45 12.0	-16 06 13	35	0.0378	0.0057	48.5	5.5	6.6	1.0	0	4.2	H

(14h 46m)

I 6854

(14h 46m)



## C1 1446+26, OBSERVATIONS OF BUTCHER-OEMLER CLUSTERS

FIELD CENTER: 14<sup>h</sup>46<sup>m</sup>42.0<sup>s</sup> 26°20'59" (B1950)14<sup>h</sup>48<sup>m</sup>53.7<sup>s</sup> 26°08'34" (J2000)

ℓ: 37.53 b: 63.79

DATE: 1980/223 - 1980/224

LIVETIME: 2582.3s

ROLL ANGLE: 79.9°

NH: 2.7E+20

REF/ID:

FIELD FLAGS:

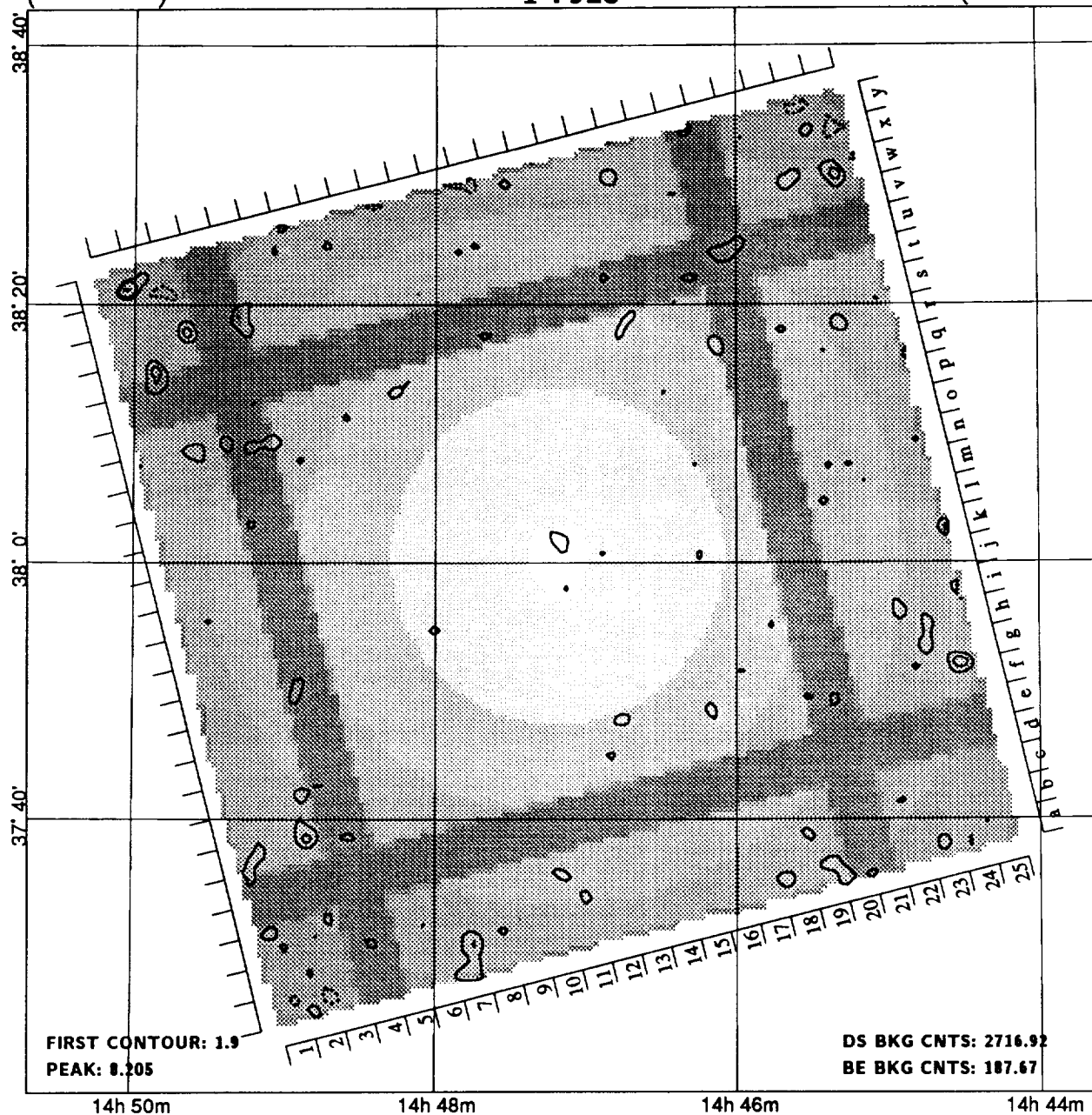
CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3335	1	14 47 12.8	26 18 57	42	0.0152	0.0033	27.1	6.9	4.6	1.5	0	7.2	H	



(14h 47m)

I 7923

(14h 47m)



## HD 130817, CORONAL ACTIVITY IN F, G, &amp; K STARS

FIELD CENTER:  $14^{\text{h}}47^{\text{m}}08.9^{\text{s}}$   $38^{\circ}00'58''$  (B1950)  
 $14^{\text{h}}49^{\text{m}}07.8^{\text{s}}$   $37^{\circ}48'34''$  (J2000)  
 $l: 63.78$   $b: 63.12$

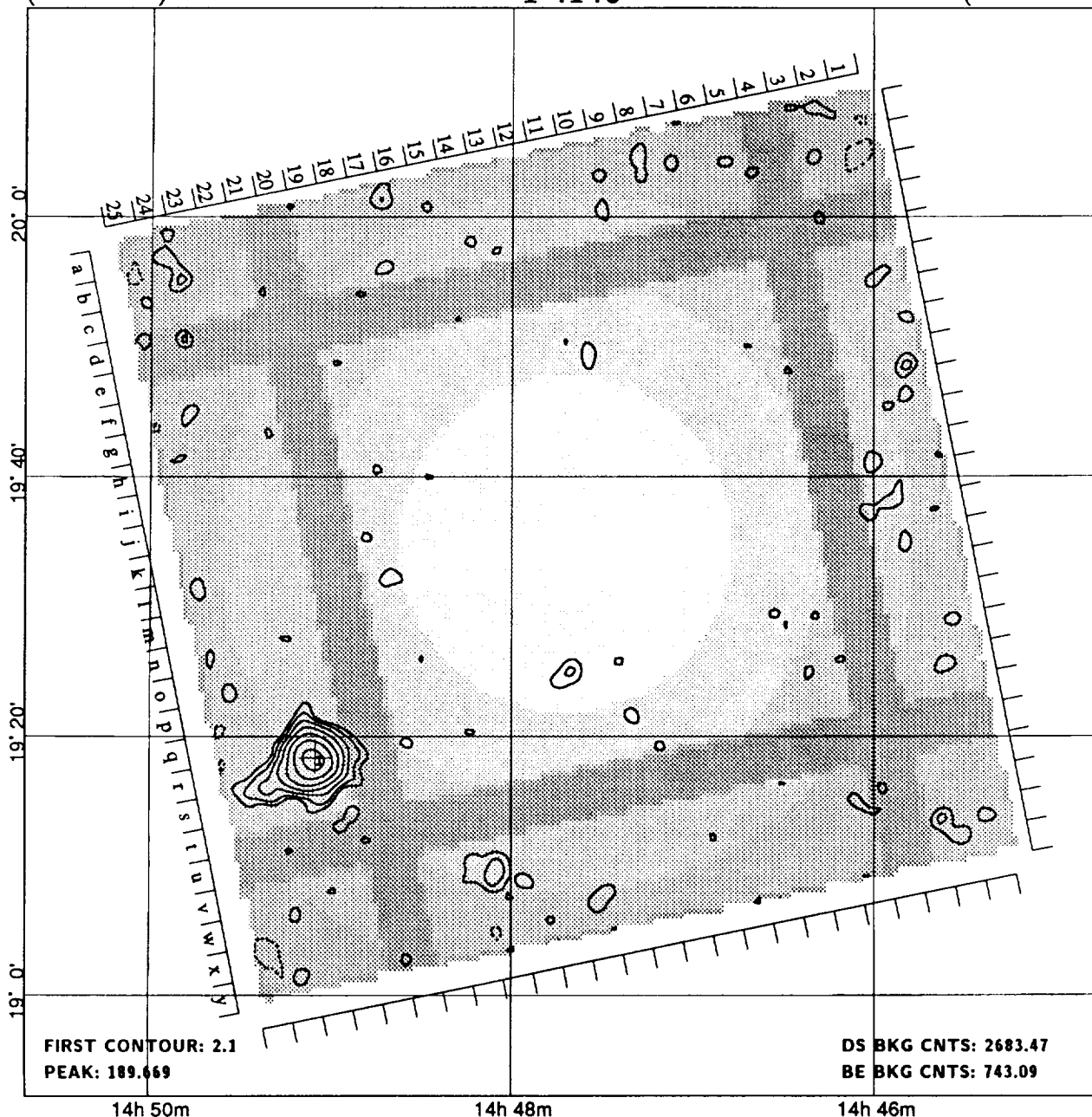
DATE: 1981/ 29 - 1981/ 29  
 LIVETIME: 2201.6s  
 ROLL ANGLE:  $-104.0^{\circ}$

NH:  $1.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 47m)

I 4146

(14h 47m)



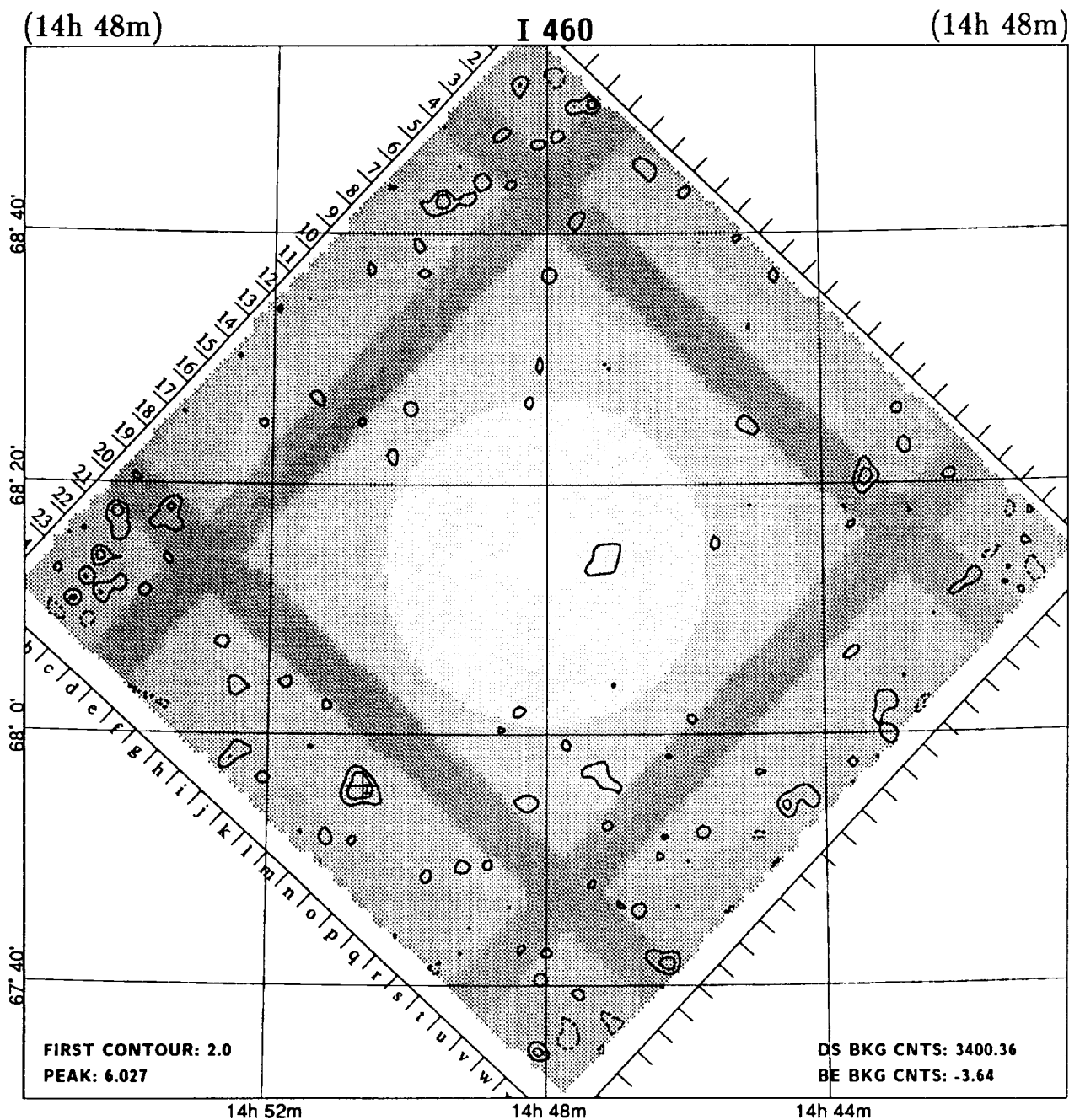
H1444+19 POSITION

FIELD CENTER:  $14^{\text{h}}47^{\text{m}}43.2^{\text{s}}$   $19^{\circ}34'11''$  (B1950)  
 $14^{\text{h}}50^{\text{m}}01.1^{\text{s}}$   $19^{\circ}21'49''$  (J2000)  
 $l: 23.35$   $b: 61.75$

DATE: 1980/224 - 1980/224  
 LIVETIME: 2174.5s  
 ROLL ANGLE:  $78.6^{\circ}$

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3337	1	14 49 05.3	19 18 20	47	0.530	0.024	481.9	5.1	21.8	1.6	0	25.1	AH	S



SHAH ABNORMAL GALAXIES SURVEY

FIELD CENTER:  $14^{\text{h}}48^{\text{m}}00.0^{\text{s}}$   $68^{\circ}12'59''$  (B1950)  
 $14^{\text{h}}48^{\text{m}}42.3^{\text{s}}$   $68^{\circ}00'36''$  (J2000)  
 $l: 107.77$   $b: 45.51$

DATE: 1979/172 - 1979/172

LIVETIME: 2755.4s

ROLL ANGLE:  $43.1^{\circ}$

NH:  $1.8\text{E}+20$

REF/ID:

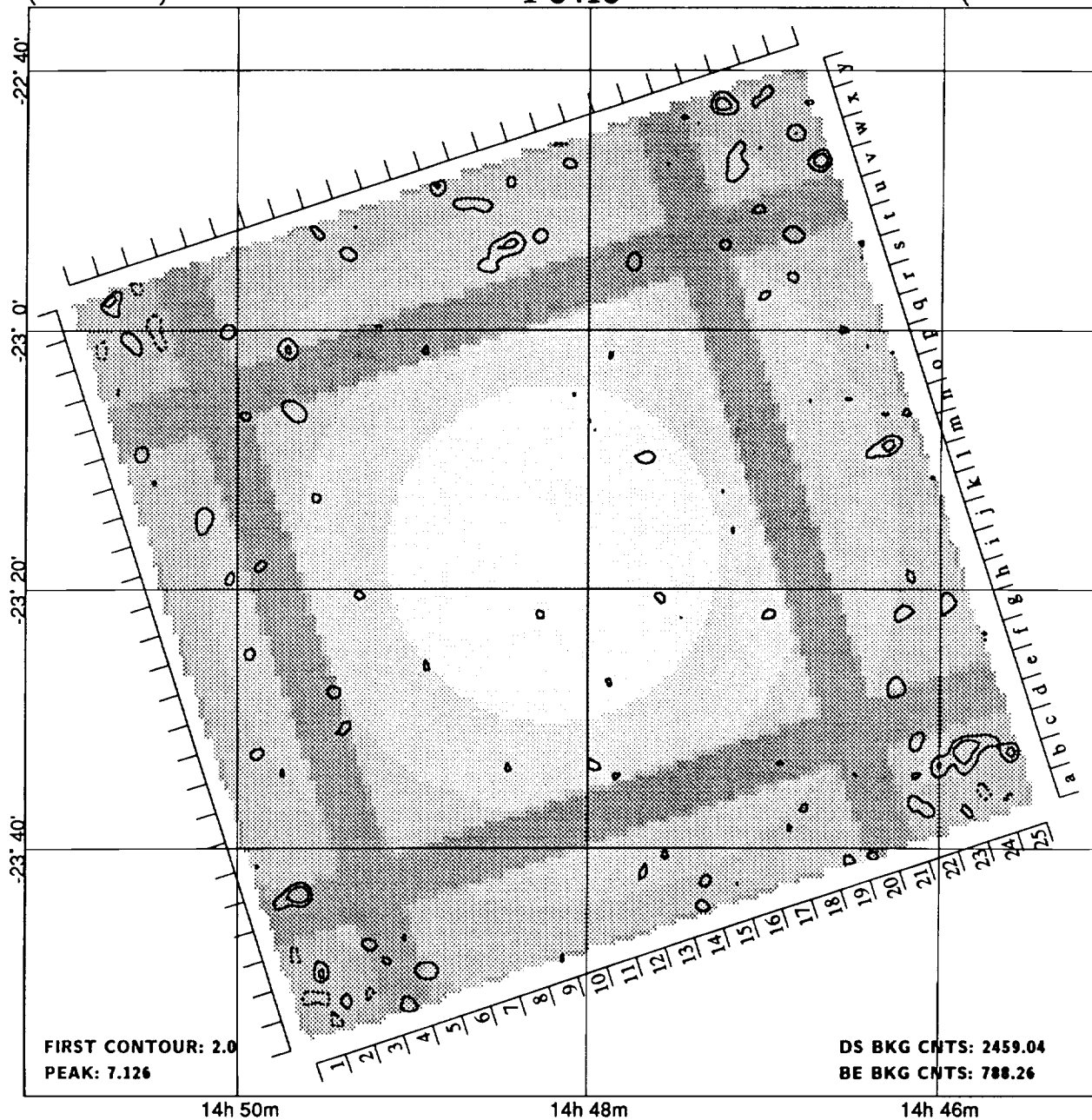
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3340	1	14 50 38.2	67 55 51	56	0.0153	0.0040	19.4	5.6	3.9	0.9	0	22.9	H	

(14h 48m)

I 5413

(14h 48m)



## 1448-232.QSO'S WITH RADIO FLAT SPECTRUM

FIELD CENTER:  $14^{\text{h}}48^{\text{m}}09.3^{\text{s}}$   $-23^{\circ}17'09''$  (B1950)  
 $14^{\text{h}}51^{\text{m}}02.5^{\text{s}}$   $-23^{\circ}29'30''$  (J2000)  
 $l$ : 335.44  $b$ : 31.72

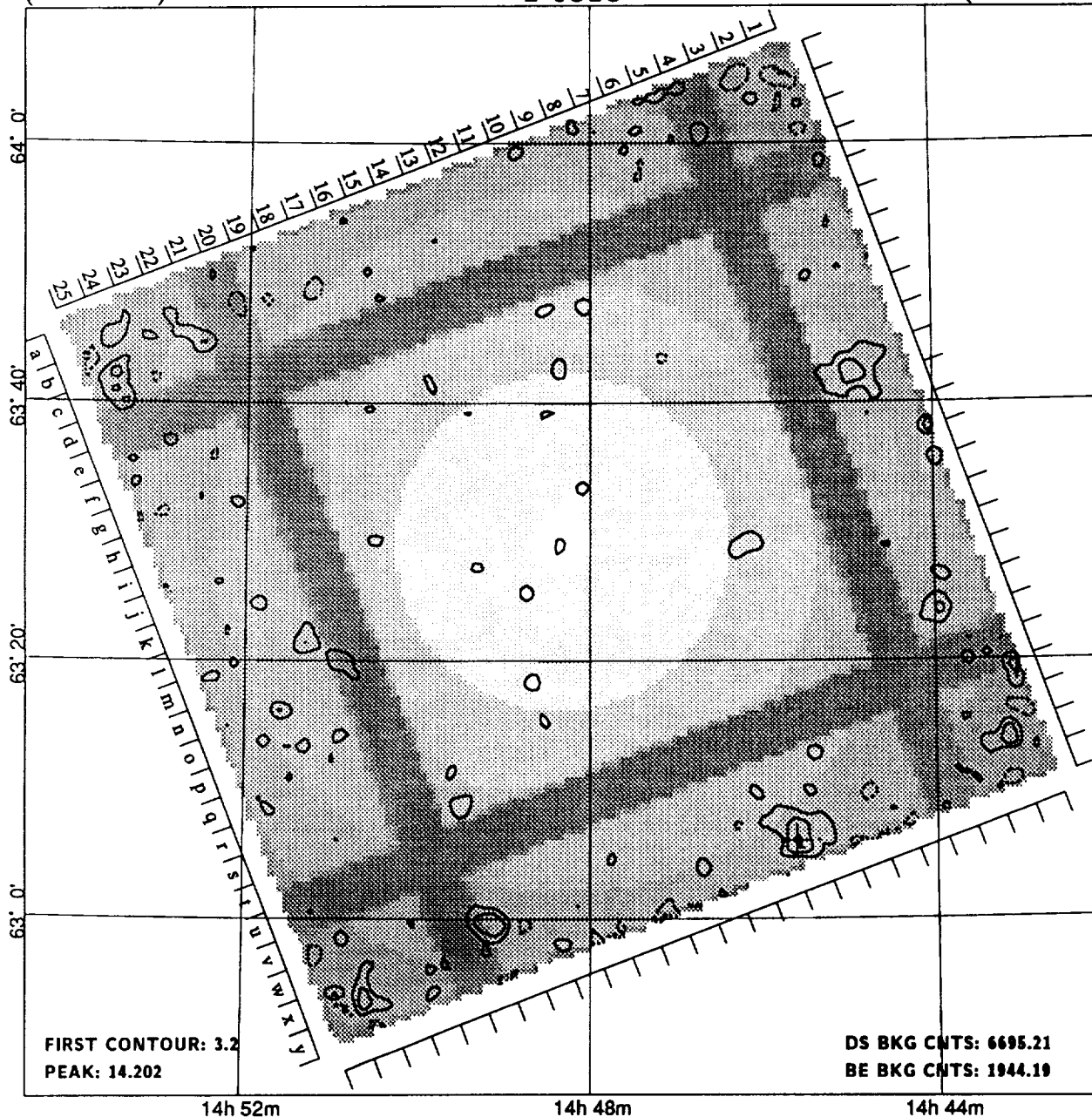
DATE: 1981/ 41 - 1981/ 41  
 LIVETIME: 1992.6s  
 ROLL ANGLE:  $-108.0^{\circ}$

NH:  $8.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(14h 48m)

I 6318

(14h 48m)



## 3CR 305, 3CR RADIO GAL. W/SEYFERT-LIKE OPT. SPECTRA

FIELD CENTER:  $14^{\text{h}}48^{\text{m}}17.6^{\text{s}}$   $63^{\circ}28'35''$  (B1950)  
 $14^{\text{h}}49^{\text{m}}21.8^{\text{s}}$   $63^{\circ}16'13''$  (J2000)  
 $l: 103.18$   $b: 49.09$

DATE: 1980/205 - 1980/205  
 LIVETIME: 5425.3s  
 ROLL ANGLE:  $69.1^{\circ}$

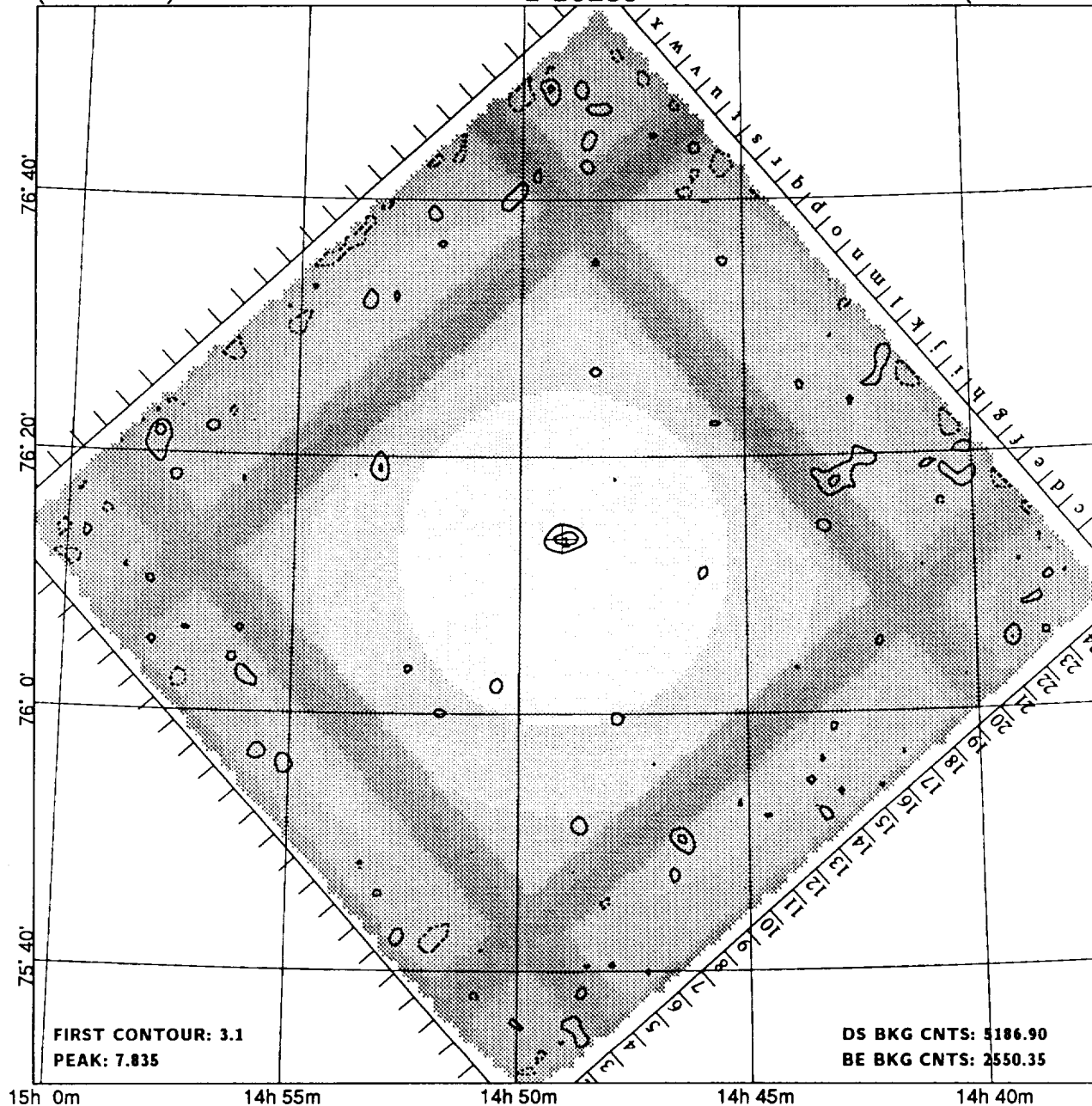
NH:  $1.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3334	1	14 45 37.2	63 06 03	55	0.0110	0.0031	21.4	14.6	3.6	1.7	200	28.8	H	

(14h 48m)

I 10239

(14h 48m)



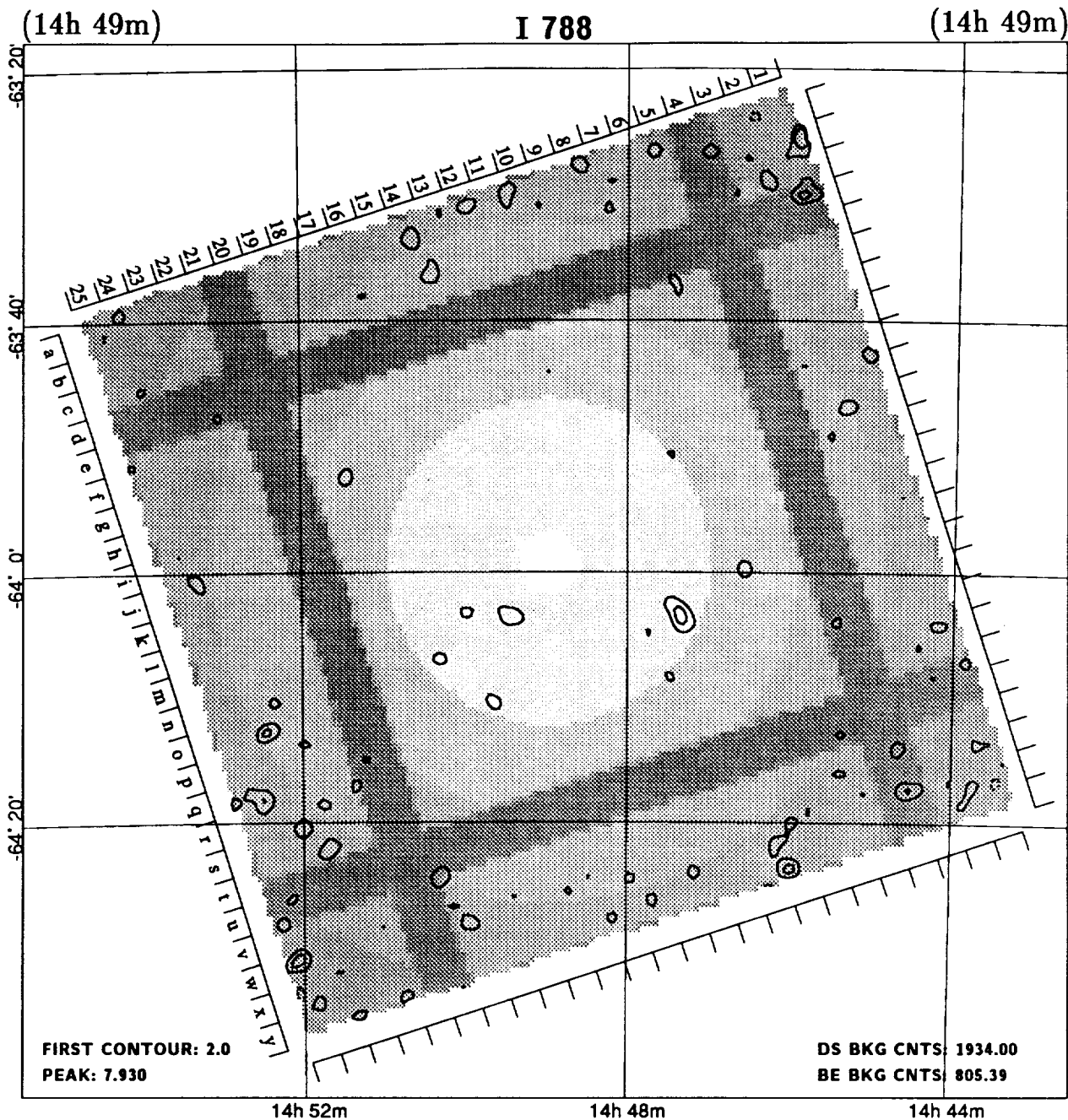
## EXTENDED EMISSION IN BL LAC OBJECTS

FIELD CENTER:  $14^{\text{h}}48^{\text{m}}58.6^{\text{s}}$   $76^{\circ}13'12''$  (B1950)  
 $14^{\text{h}}48^{\text{m}}30.8^{\text{s}}$   $76^{\circ}00'50''$  (J2000)  
 $l: 114.18$   $b: 39.06$

DATE: 1980/356 - 1980/356  
 LIVETIME: 4203.2s  
 ROLL ANGLE:  $-131.4^{\circ}$

NH:  $3.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3336	1L	14 49 04.1	76 13 39	36	0.0107	0.0029	33.3	21.7	3.6	0.7	0	0.5		



PSR 1449-64 RADIO PULSARS, SEARCH FOR X-RAY EMISSION

FIELD CENTER:  $14^{\text{h}}49^{\text{m}}00.0^{\text{s}}$   $-63^{\circ}59'59''$  (B1950)  
 $14^{\text{h}}53^{\text{m}}07.2^{\text{s}}$   $-64^{\circ}12'15''$  (J2000)  
 $l: 315.70$   $b: -4.39$

DATE: 1980/228 - 1980/228  
 LIVETIME: 1567.2s  
 ROLL ANGLE:  $72.1^{\circ}$

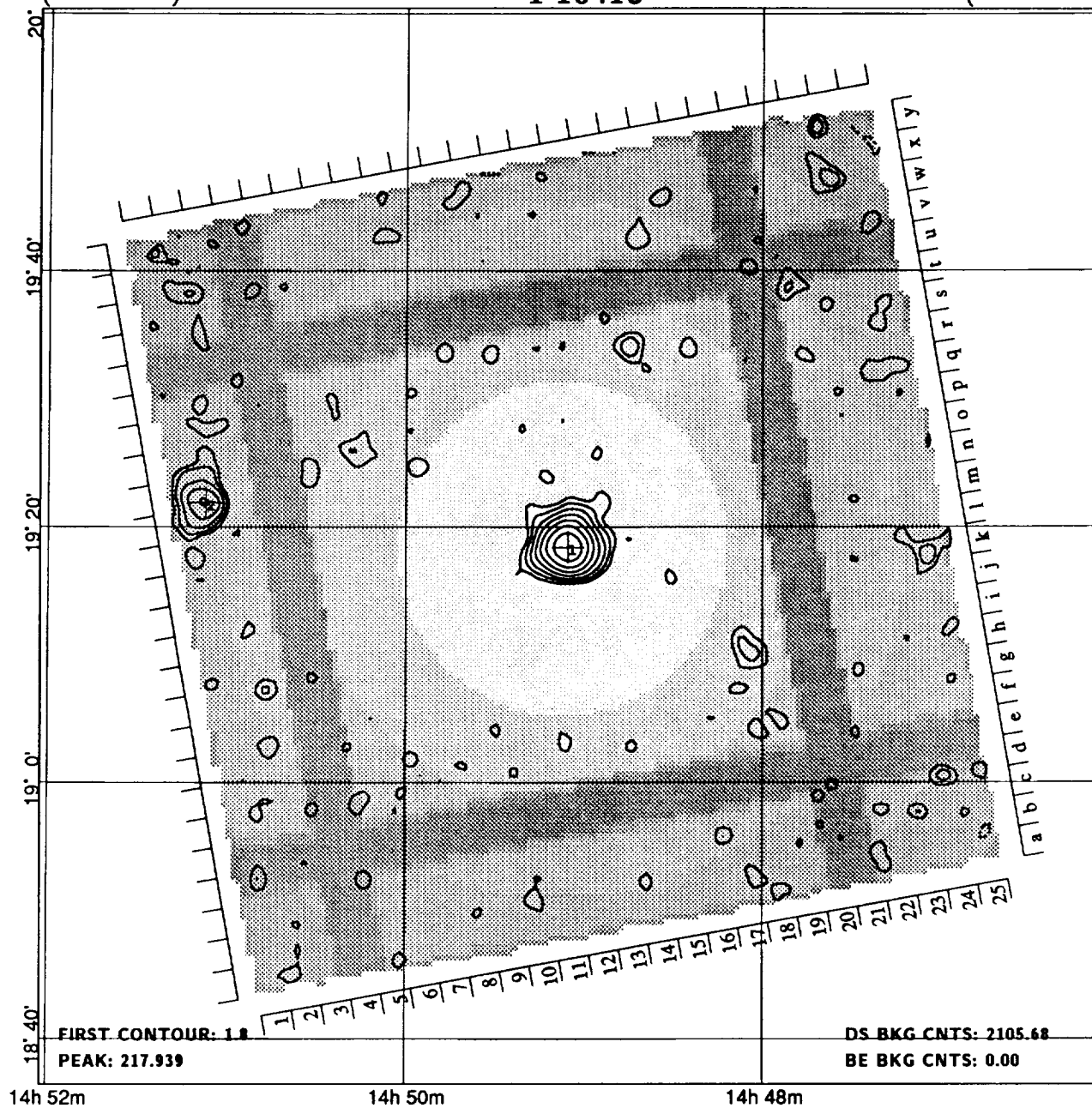
NH:  $1.2\text{E}+21$   
 REF/ID:  
 FIELD FLAGS:



(14h 49m)

I 10418

(14h 49m)



## XI BOO A,B FIELDS &amp; CORONAE IN LATE-TYPE STARS

FIELD CENTER:  $14^h 49^m 04.8^s$   $19^\circ 18' 26''$  (B1950)  
 $14^h 51^m 22.8^s$   $19^\circ 06' 08''$  (J2000)  
 $l: 23.09$   $b: 61.36$

DATE: 1981/ 24 - 1981/ 24  
 LIVETIME: 1706.3s  
 ROLL ANGLE:  $-100.2^\circ$

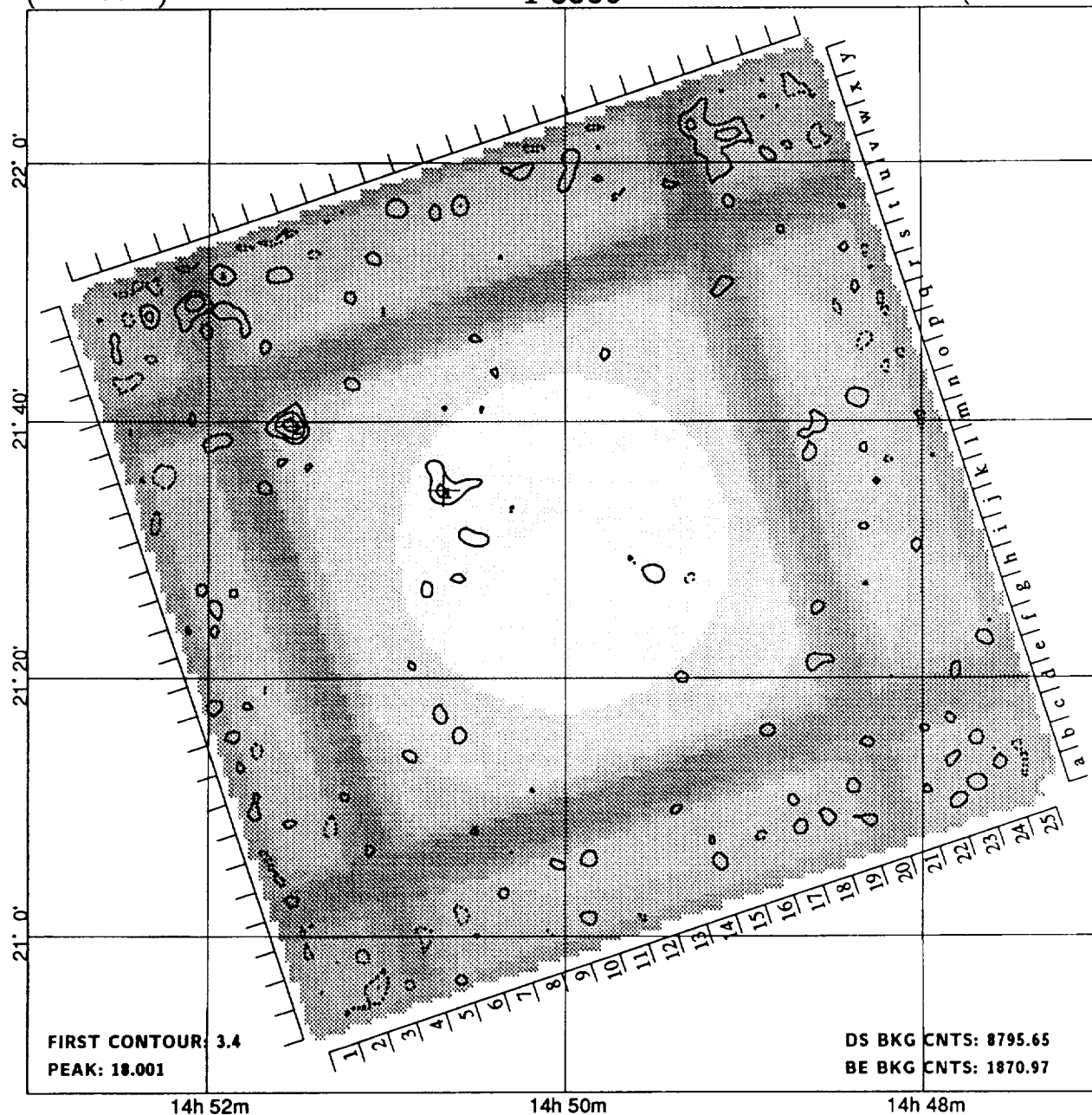
NH:  $2.5E+20$   
 REF/ID: S  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
3337	1L	14 49 05.3	19 18 22	31	0.628	0.028	799.4	144.6	22.6	1.3	0	0.3	A S
3344	2L	14 51 07.3	19 21 54	50	0.078	0.015	49.6	15.4	5.1	1.4	0	29.3	S

(14h 50m)

I 3586

(14h 50m)



## 4U 1456+22 SUPERCLUSTER STUDY

FIELD CENTER:  $14^h 50^m 00.0^s$   $21^\circ 29' 59''$  (B1950)  
 $14^h 52^m 16.0^s$   $21^\circ 17' 44''$  (J2000)  
 $l: 27.58$   $b: 61.91$

DATE: 1979/ 27 - 1979/ 27  
 LIVETIME: 7127.4s  
 ROLL ANGLE:  $-108.4^\circ$

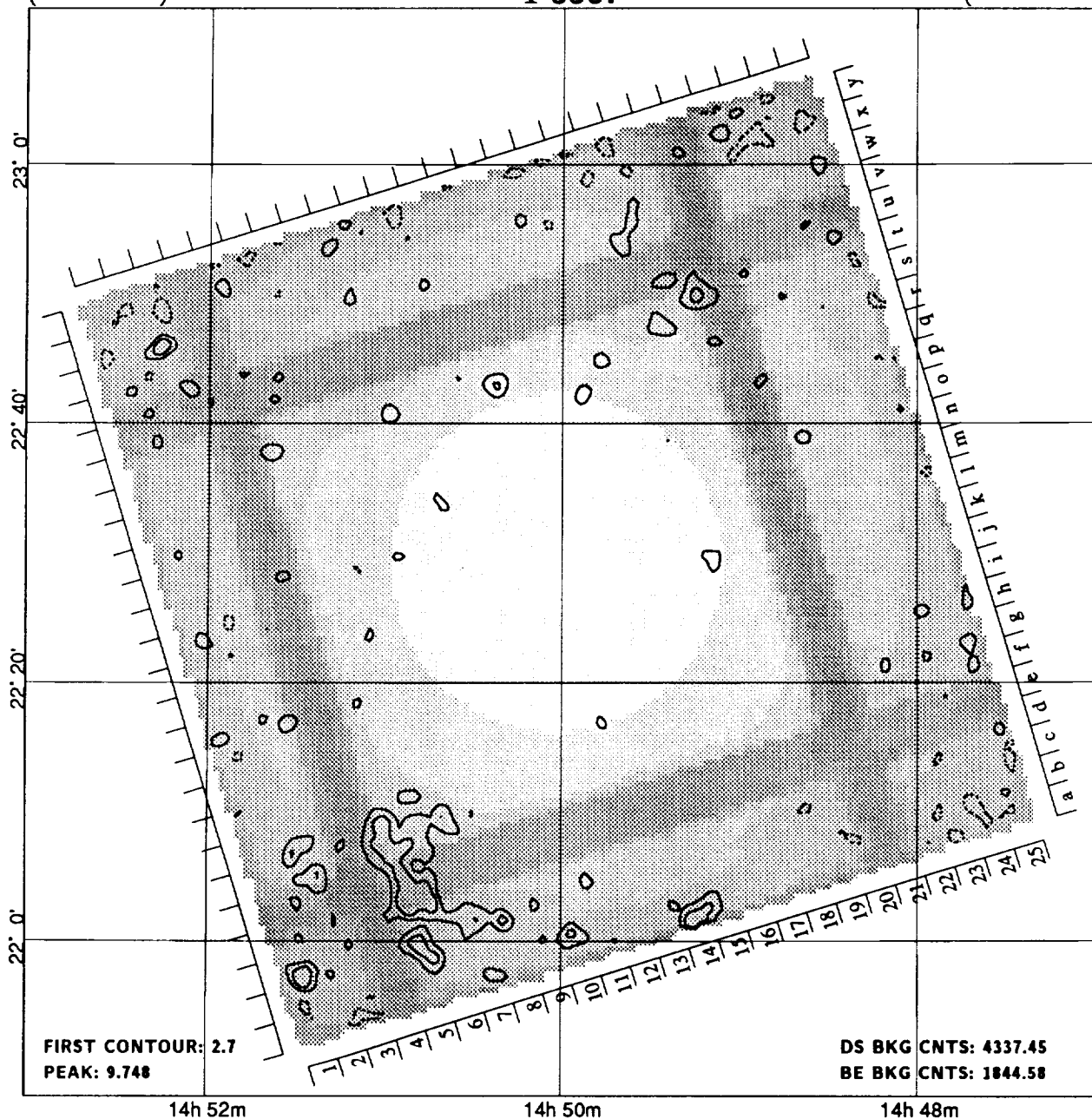
NH:  $2.7E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3341	1	14 50 41.2	21 34 41	43	0.0058	0.0015	27.7	25.3	3.8	1.0	0	11.2		
3346	2	14 51 31.8	21 39 37	51	0.0110	0.0022	36.3	16.7	5.0	0.8	700	23.6	H	

(14h 50m)

I 3587

(14h 50m)



## 4U 1456+22 SUPERCLUSTER STUDY

FIELD CENTER:  $14^{\text{h}}50^{\text{m}}00.0^{\text{s}}$   $22^{\circ}29'59''$  (B1950)  
 $14^{\text{h}}52^{\text{m}}15.0^{\text{s}}$   $22^{\circ}17'44''$  (J2000)  
 $l$ : 29.62  $b$ : 62.21

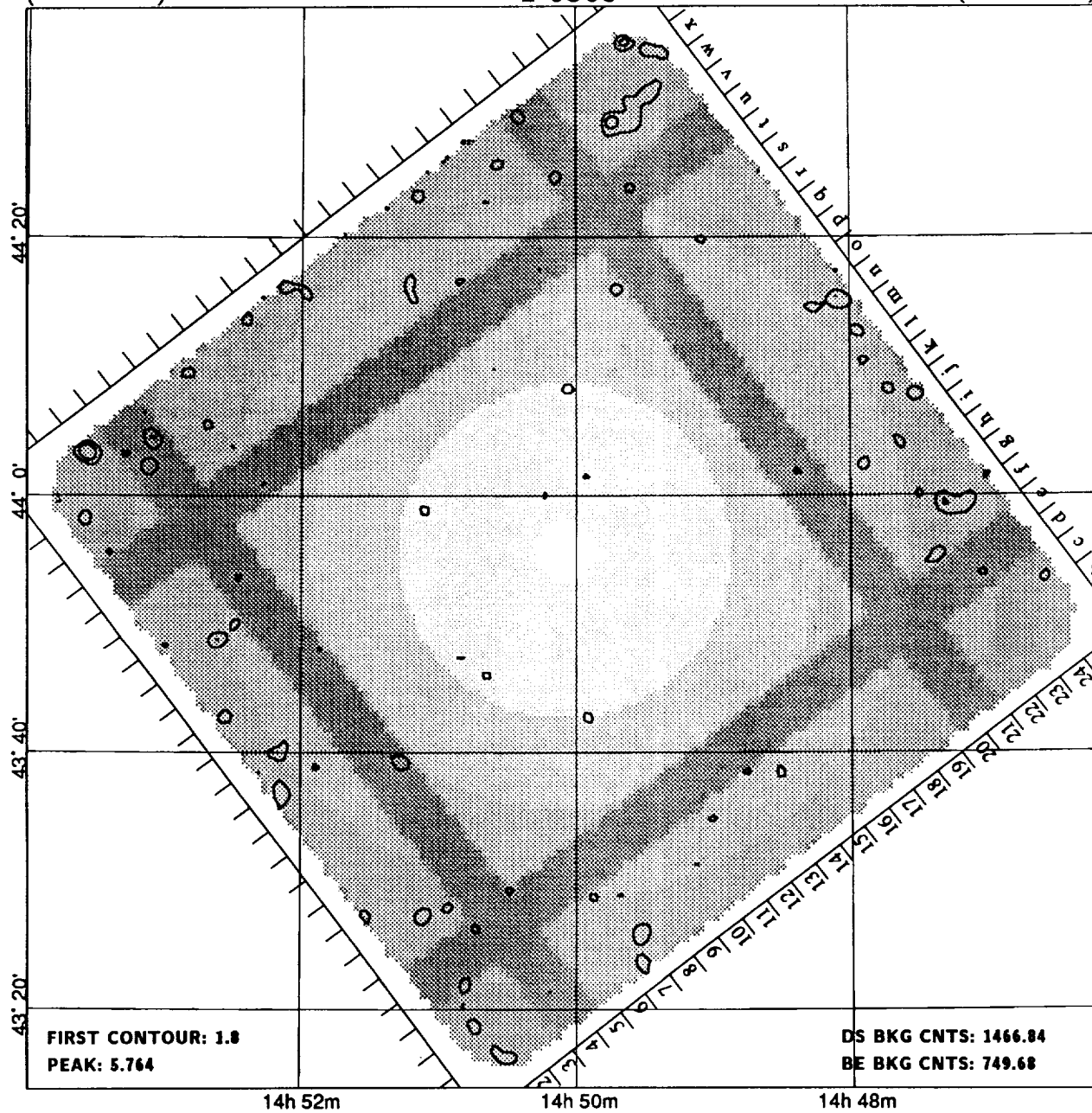
DATE: 1979/ 30 - 1979/ 30  
 LIVETIME: 3514.8s  
 ROLL ANGLE:  $-107.0^{\circ}$

NH:  $2.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(14h 50m)

I 6363

(14h 50m)



## A 1450+43, EMISSION LINE GALAXY SURVEY

FIELD CENTER:  $14^{\text{h}}50^{\text{m}}06.0^{\text{s}}$   $43^{\circ}55'59''$  (B1950)  
 $14^{\text{h}}51^{\text{m}}56.2^{\text{s}}$   $43^{\circ}43'44''$  (J2000)  
 $l: 75.25$   $b: 60.63$

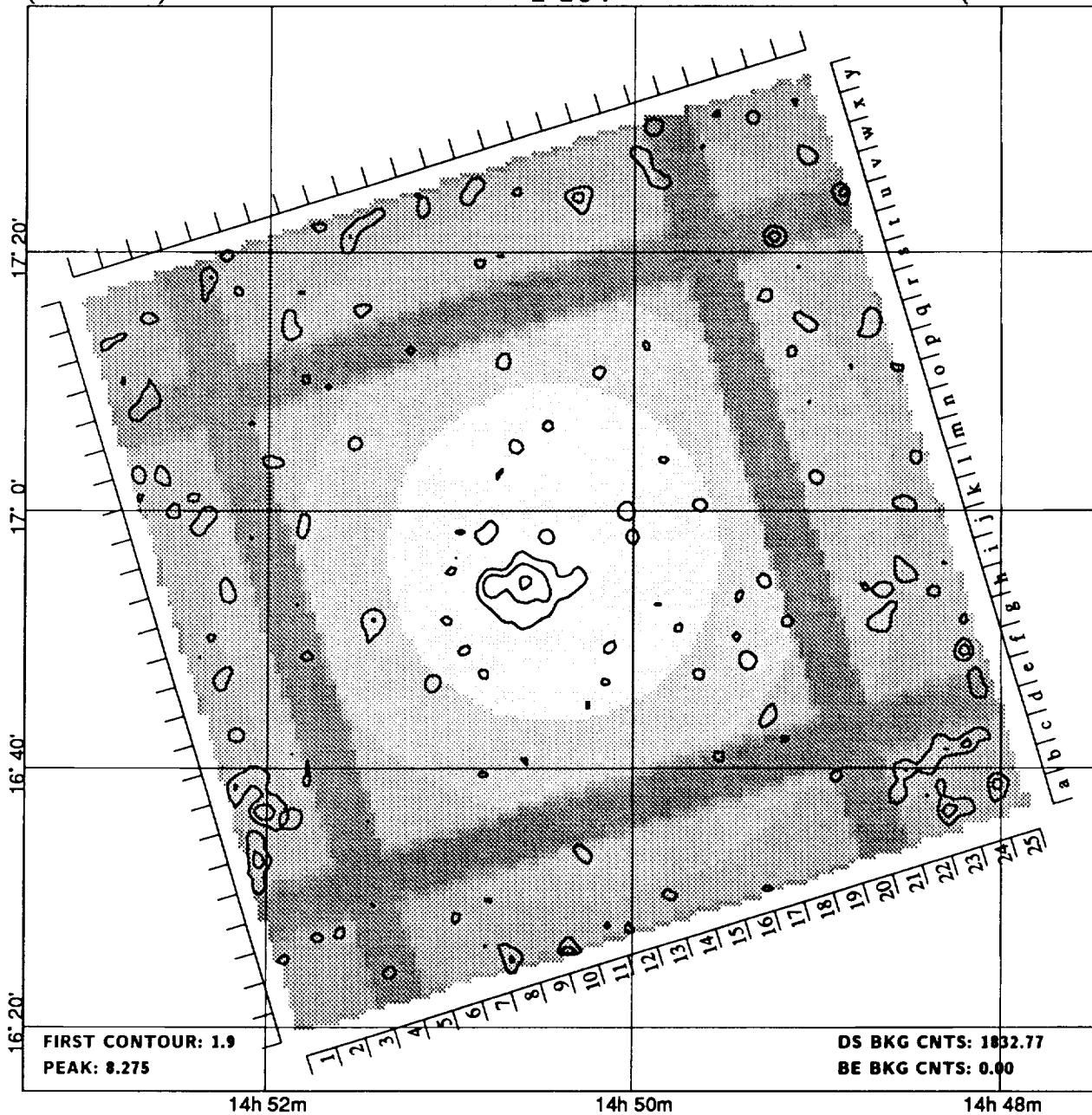
DATE: 1980/ 2 - 1980/ 2  
 LIVETIME: 1188.6s  
 ROLL ANGLE:  $-127.1^{\circ}$

NH:  $1.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 50m)

I 164

(14h 50m)



## A1983 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $14^{\text{h}}50^{\text{m}}24.0^{\text{s}}$   $16^{\circ}56'59''$  (B1950)  
 $14^{\text{h}}52^{\text{m}}44.0^{\text{s}}$   $16^{\circ}44'45''$  (J2000)  
 $l: 18.94$   $b: 60.12$

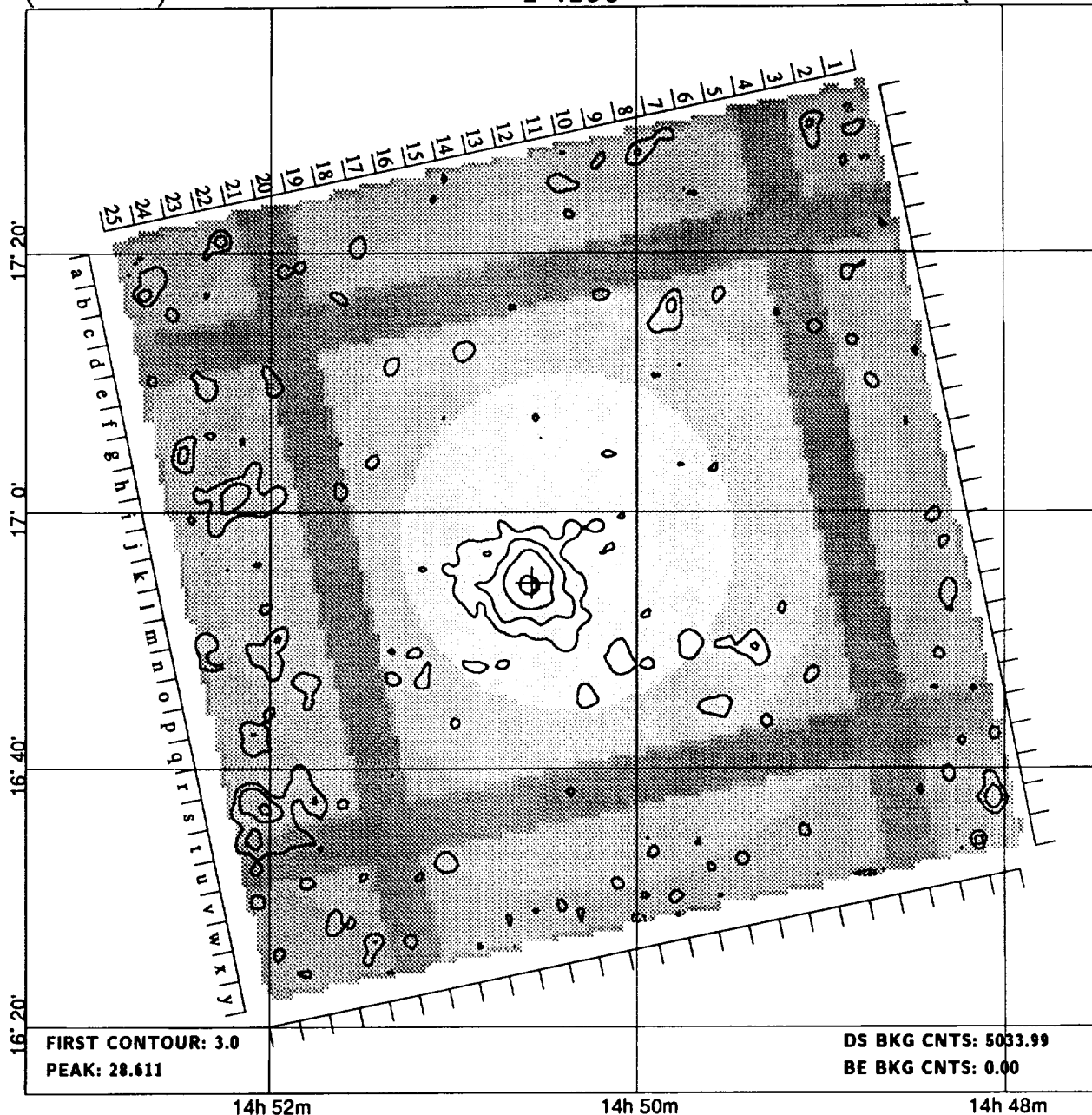
DATE: 1979/ 30 - 1979/ 30  
 LIVETIME: 1485.2s  
 ROLL ANGLE:  $-107.0^{\circ}$

NH:  $2.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: CLS

(14h 50m)

I 4190

(14h 50m)



A 1983, CLUSTER WITH WELL-STUDIED OPTICAL PROPERTIES

FIELD CENTER:  $14^h 50^m 24.0''$   $16^\circ 56' 59''$  (B1950)  
 $14^h 52^m 44.0''$   $16^\circ 44' 45''$  (J2000)  
 $l: 18.94$   $b: 60.12$

DATE: 1979/225 - 1979/225  
 LIVETIME: 4079.2s  
 ROLL ANGLE:  $78.3^\circ$

NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS: CL

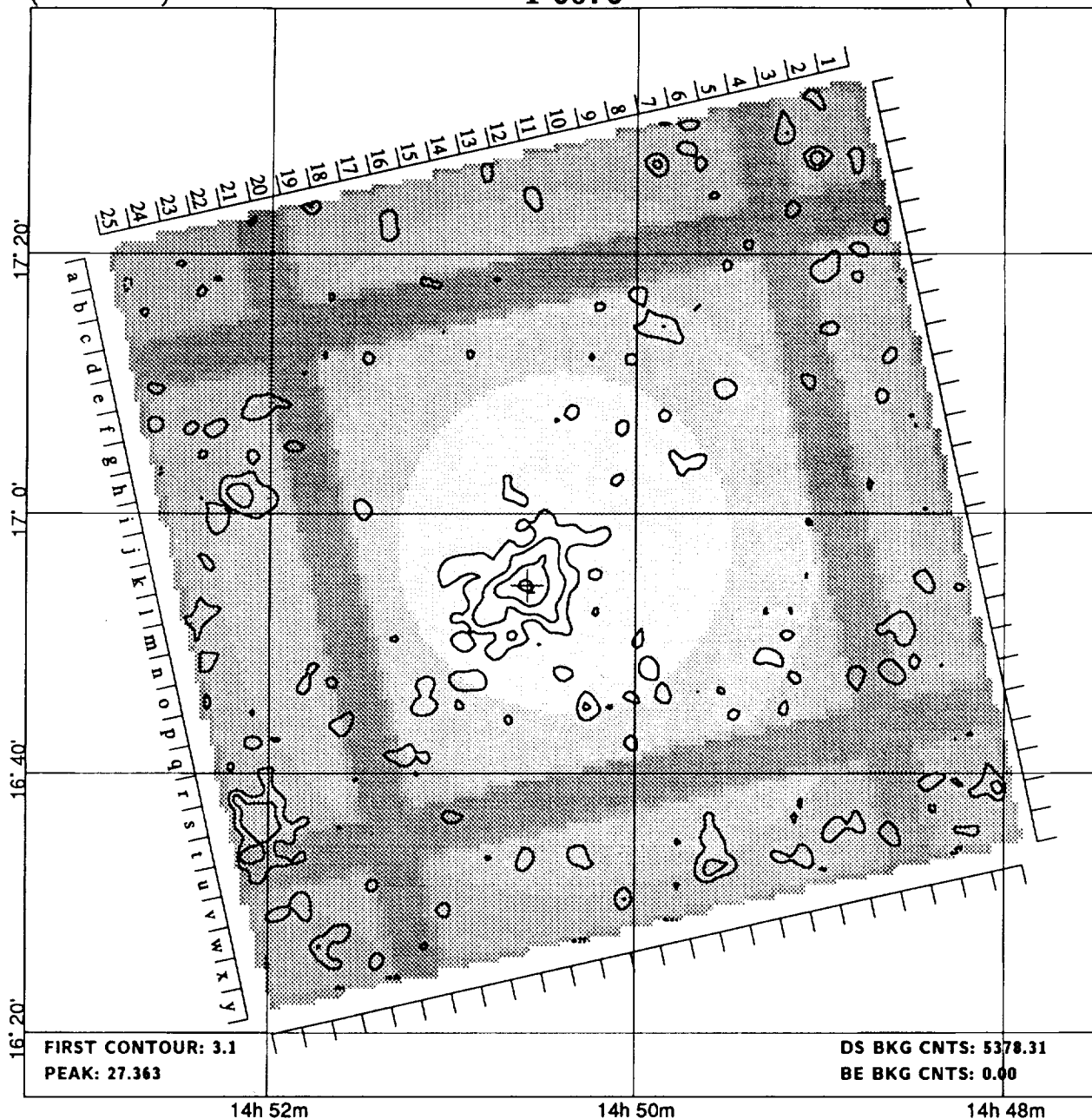
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ ''	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3339	1L	14 50 34.5	16 54 29	31	0.0228	0.0051	67.0	76.0	4.4	3.4	0	3.6	A	CLG



(14h 50m)

I 6076

(14h 50m)



## A1983, DETAILED STUDY OF CLUSTER EXTENTS

FIELD CENTER:  $14^h 50^m 24.0^s$   $16^\circ 56' 59''$  (B1950)  
 $14^h 52^m 44.0^s$   $16^\circ 44' 45''$  (J2000)  
 $l: 18.94$   $b: 60.12$

DATE: 1980/224 - 1980/224  
 LIVETIME: 4358.2s  
 ROLL ANGLE:  $77.4^\circ$

NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS: CL

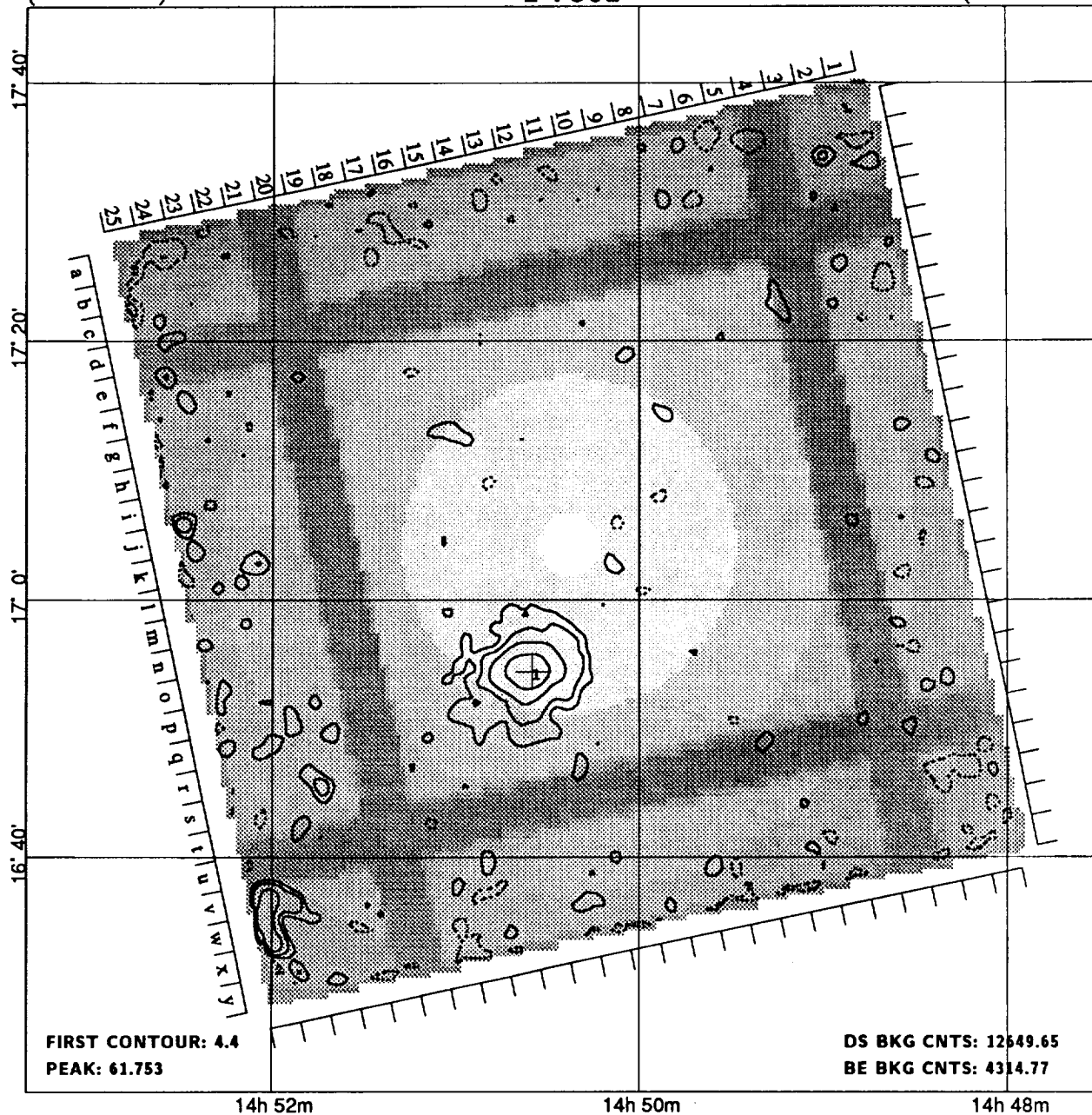
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3339	1L	14 50 35.5	16 54 31	31	0.0231	0.0044	72.4	57.6	5.1	3.4	0	3.6	A	CLG



(14h 50m)

I 7861

(14h 50m)



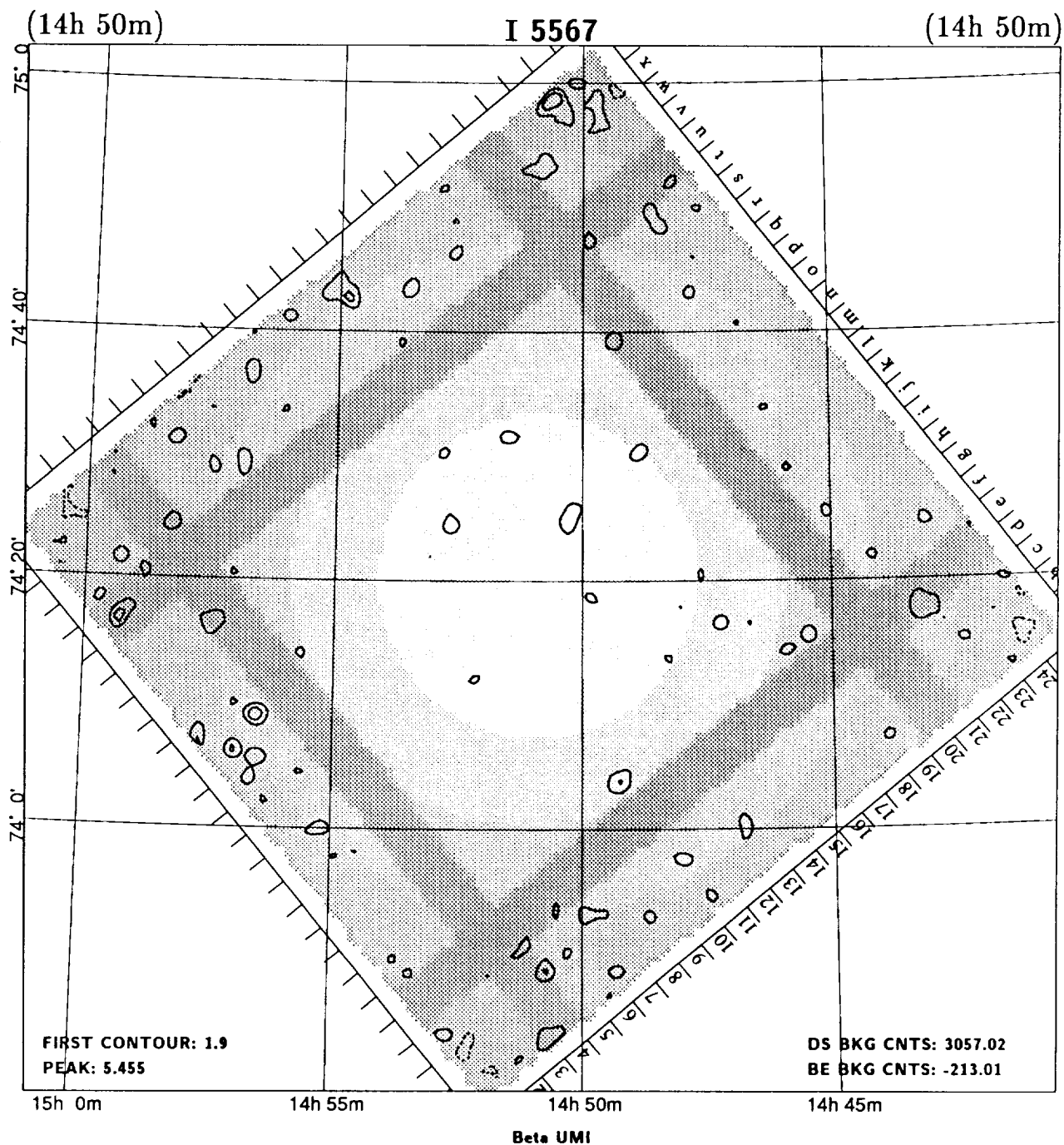
ABELL 1983, IRREG CLUSTERS OF GALAXIES NOT YET IN DYNAMICAL EQ

FIELD CENTER:  $14^h 50^m 24.6^s$   $17^\circ 03' 51''$  (B1950)  
 $14^h 52^m 44.5^s$   $16^\circ 51' 37''$  (J2000)  
 $l: 19.15$   $b: 60.16$

DATE: 1980/224 - 1980/225  
 LIVETIME: 10250.4s  
 ROLL ANGLE:  $78.1^\circ$

NH:  $2.1E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3339	1L	14 50 35.2	16 54 22	38	0.0215	0.0032	145.7	157.3	6.7	3.3	0	9.8	A	CLG



FIELD CENTER:  $14^{\text{h}}50^{\text{m}}51.0^{\text{s}}$   $74^{\circ}20'59''$  (B1950)  
 $14^{\text{h}}50^{\text{m}}44.1^{\text{s}}$   $74^{\circ}08'43''$  (J2000)  
 $l: 112.64$   $b: 40.51$

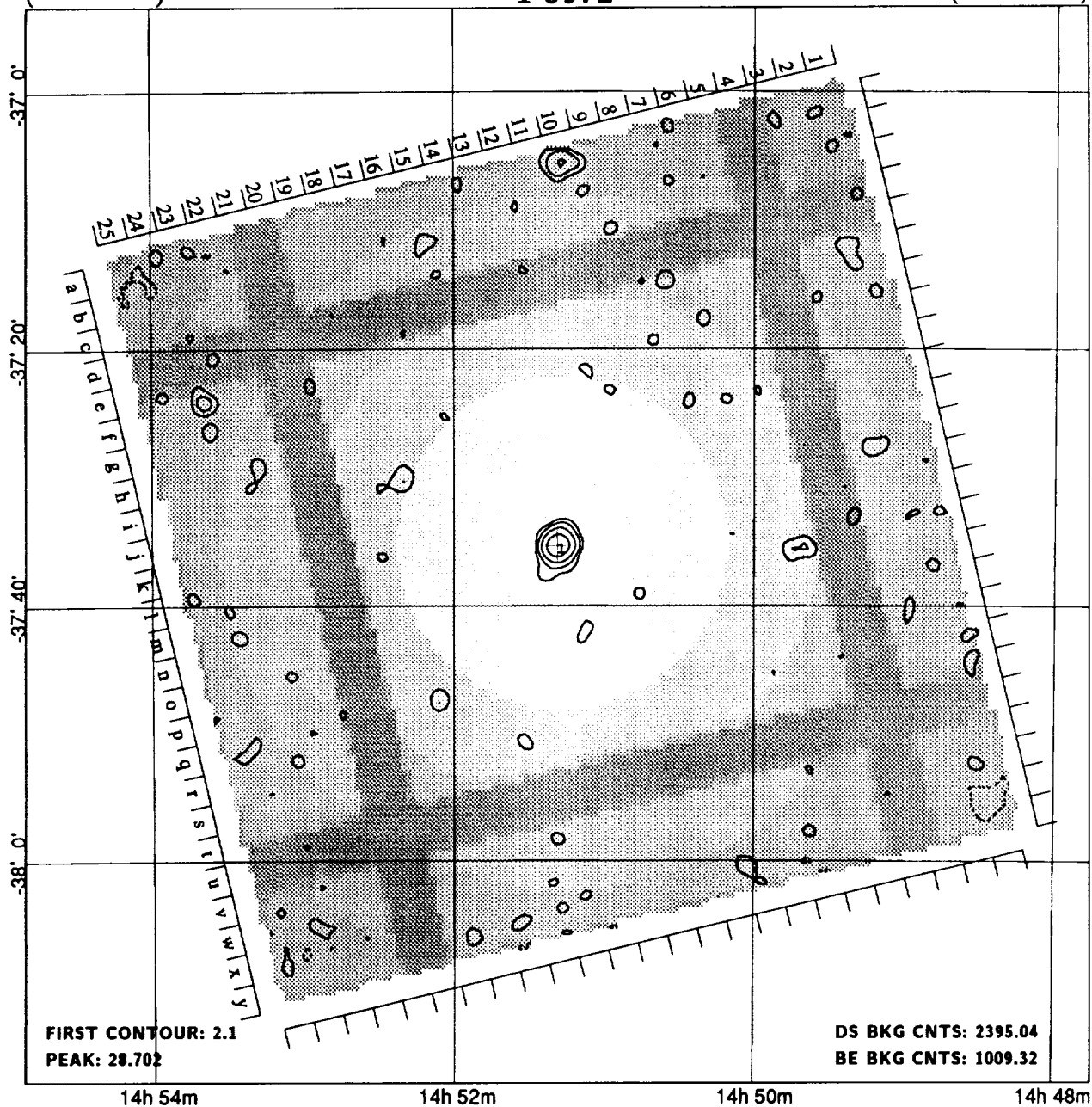
DATE: 1980/ 1 - 1980/ 1  
 LIVETIME: 2477.2s  
 ROLL ANGLE:  $-129.4^{\circ}$

NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 51m)

I 3972

(14h 51m)



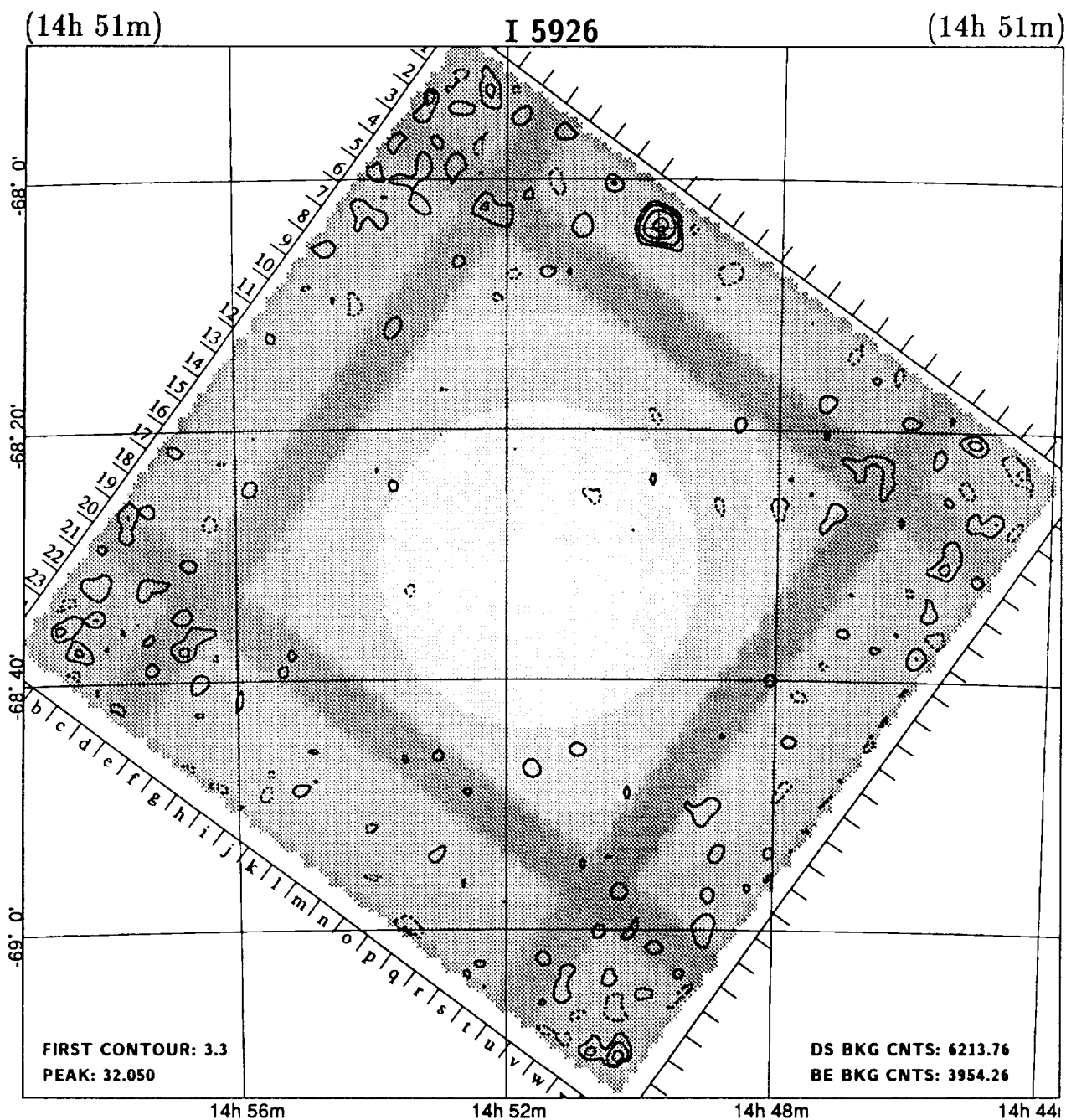
## 1451-375, BRIGHT NEARBY QUASAR

FIELD CENTER:  $14^h 51^m 18.3^s$   $-37^\circ 35' 22''$  (B1950)  
 $14^h 54^m 27.4^s$   $-37^\circ 47' 33''$  (J2000)  
 $l: 328.23$   $b: 18.96$

DATE: 1979/213 - 1979/213  
 LIVETIME: 1940.8s  
 ROLL ANGLE:  $76.6^\circ$

NH:  $6.3E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3345	1L	14 51 18.7	-37 35 18	31	0.0736	0.0086	106.4	14.6	8.4	1.0	0	0.1	



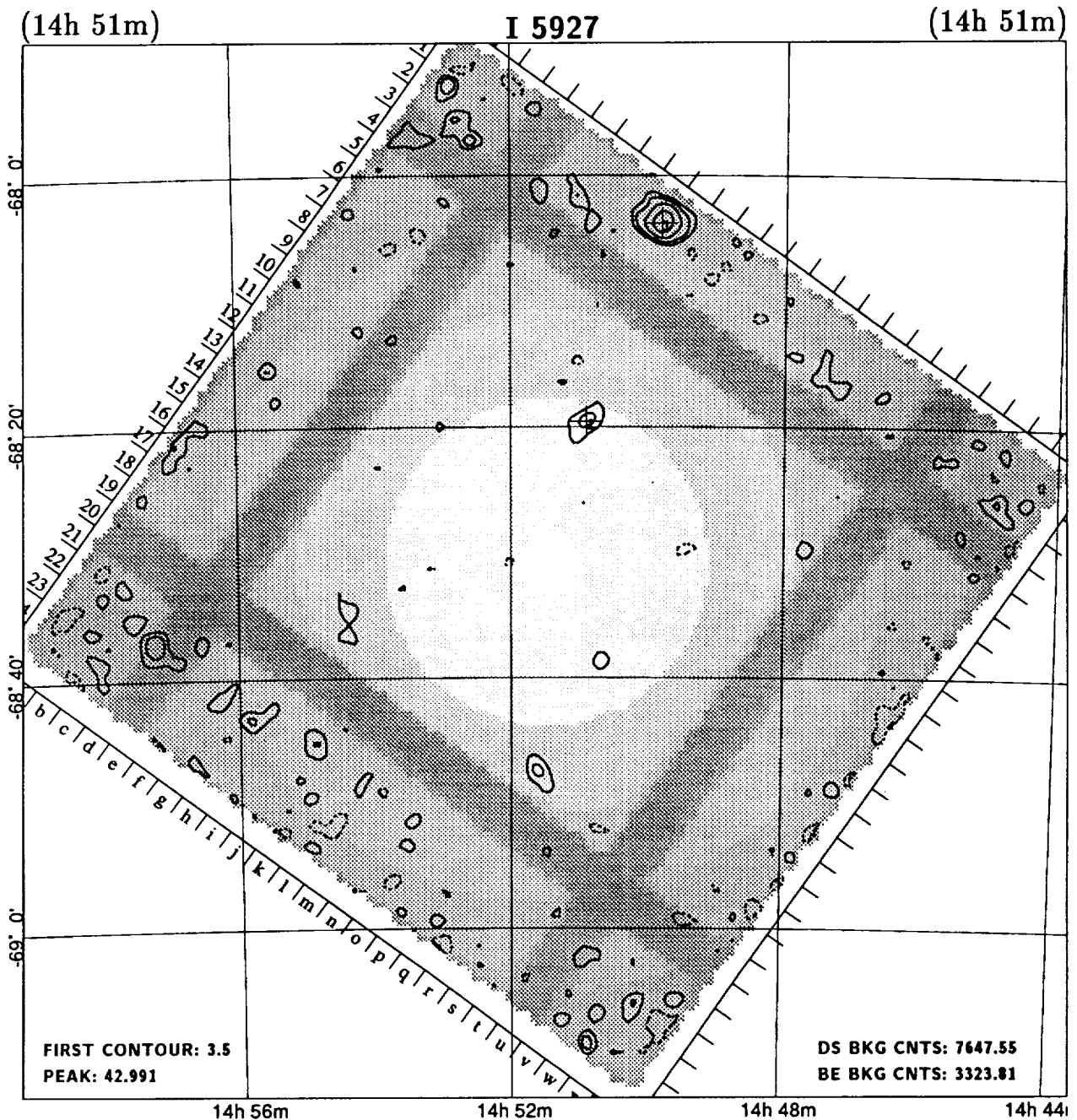
**RADIO PULSAR PROJECT:**

FIELD CENTER:  $14^h 51^m 29.1^s$   $-68^\circ 31' 29''$  (B1950)  
 $14^h 56^m 00.2^s$   $-68^\circ 43' 37''$  (J2000)  
 $l$ : 313.87  $b$ : -8.54

DATE: 1980/277 - 1980/277  
 LIVETIME: 5035.2s  
 ROLL ANGLE:  $36.1^\circ$

NH:  $9.6E+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3338	1L	14 49 48.2	-68 03 52	50	0.0321	0.0057	60.1	21.9	5.5	1.0	0	29.1	A	



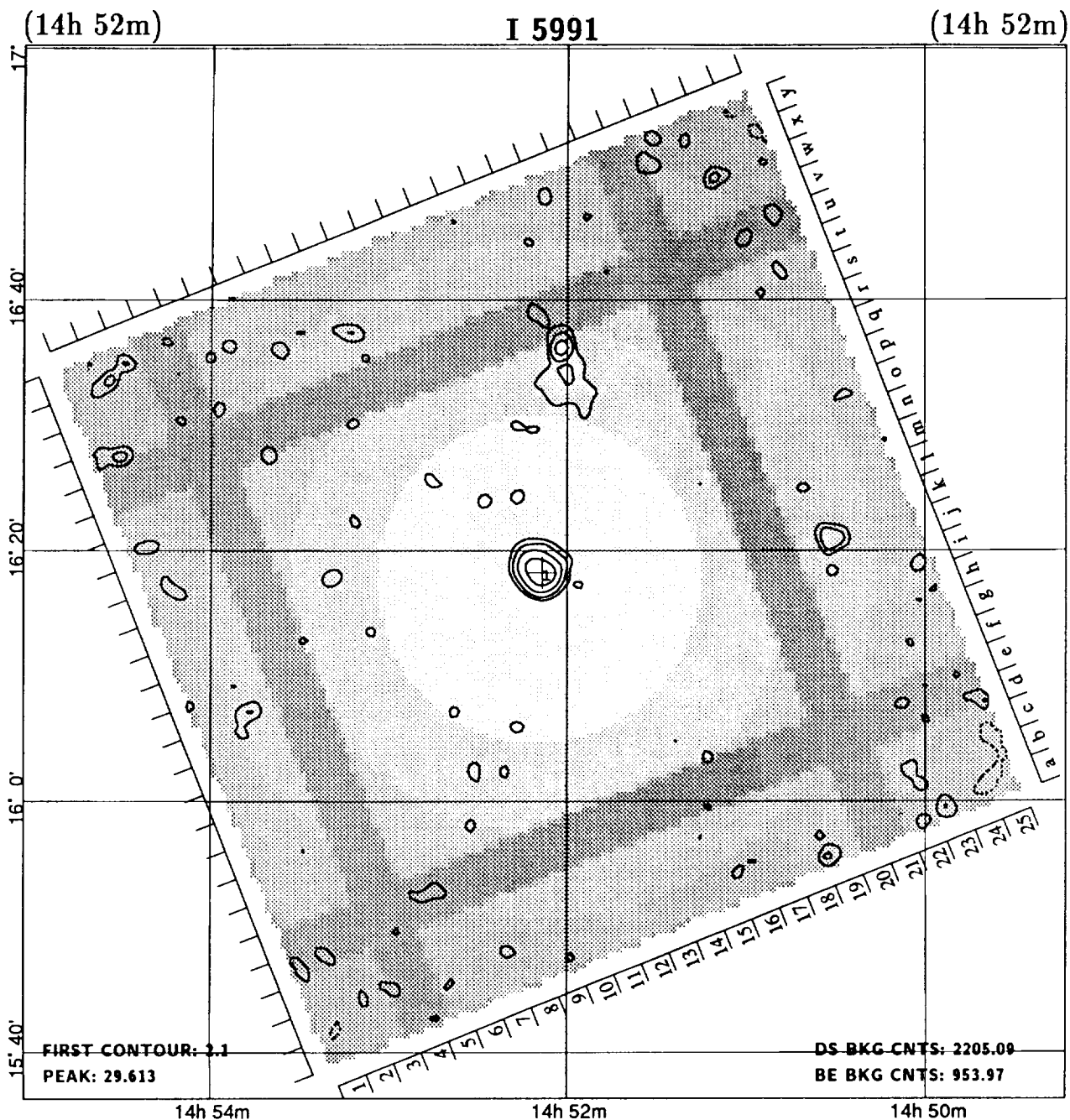
**RADIO PULSAR PROJECT:**

**FIELD CENTER:**  $14^{\text{h}}51^{\text{m}}29.1^{\text{s}}$   $-68^{\circ}31'29''$  (B1950)  
 $14^{\text{h}}56^{\text{m}}00.2^{\text{s}}$   $-68^{\circ}43'37''$  (J2000)  
 $\ell$ : 313.87  $b$ : -8.54

**DATE:** 1980/277 - 1980/277  
**LIVETIME:** 6419.6s  
**ROLL ANGLE:** 35.7°

**NH:** 9.6E+20  
**REF/ID:**  
**FIELD FLAGS:** C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3338	1	14 49 47.7	-68 03 45	48	0.0360	0.0043	86.1	17.9	8.4	1.2	0	29.2	AH	
3342	2	14 50 53.7	-68 19 33	43	0.0077	0.0018	31.8	21.2	4.4	0.8	0	11.9	H	



FIELD CENTER:  $14^h 52^m 08.0^s$   $16^\circ 18' 17''$  (B1950)  
 $14^h 54^m 28.4^s$   $16^\circ 06' 08''$  (J2000)  
 $l: 18.15$   $b: 59.46$

DATE: 1980/ 22 - 1980/ 22  
 LIVETIME: 1786.8s  
 ROLL ANGLE:  $-111.6^\circ$

NH:  $2.0E+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3349	1L	14 52 08.3	16 18 15	31	0.071	0.010	94.0	38.0	6.8	1.3	0	0.5	



(14h 52m)



NH: 2.6E+20

REF /ID:

**FIELD FLAGS:**

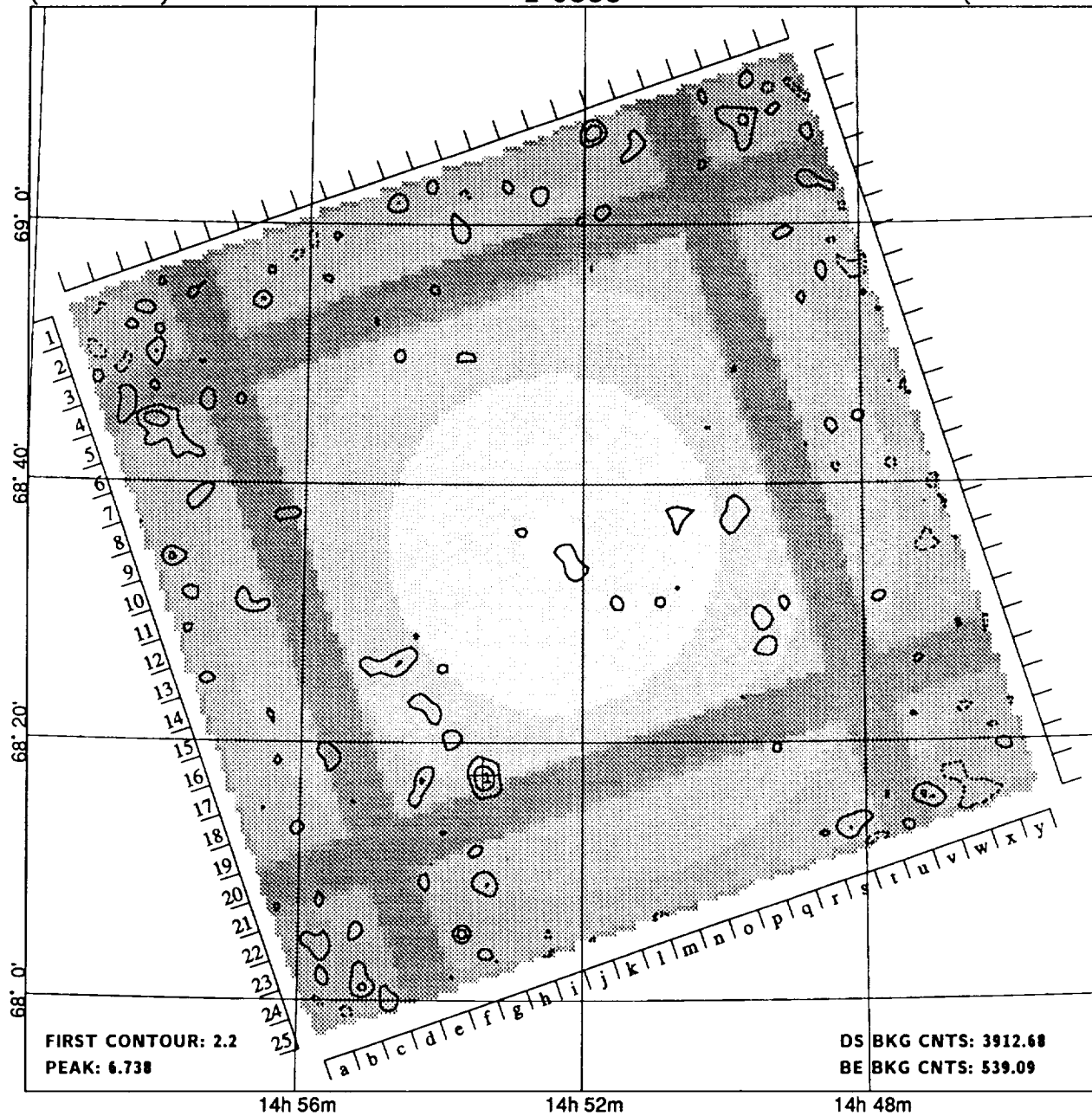
CAT	FLD	RA	DEC	±	COUNT	±	NET	BKG	S/N	SIZE	RECO	R'	SRC	ID
#	#	(1950)	(1950)	"	RATE		CTS	CTS		COR			FLG	
3343	1	14 50 54.2	18 45 58	55	0.0103	0.0026	22.7	10.3	3.9	0.8	0	19.0	H	
3347	2	14 51 40.8	18 42 14	45	0.0084	0.0023	22.8	16.2	3.6	0.8	0	10.6	H	
3348	3	14 52 08.2	18 42 35	41	0.0144	0.0027	41.0	16.0	5.4	26.0	0	7.4	H	
3350	4	14 52 13.2	18 50 39	31	0.1615	0.0073	500.2	16.8	22.0	2.1	0	0.8	H	CLG
3351	5	14 52 39.9	18 57 14	45	0.0088	0.0023	24.4	16.6	3.8	0.8	0	10.2		



(14h 52m)

I 6888

(14h 52m)



A2002, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER: 14<sup>h</sup> 52<sup>m</sup> 18.0<sup>s</sup> 68° 34' 59" (B1950)  
 14<sup>h</sup> 52<sup>m</sup> 55.8<sup>s</sup> 68° 22' 48" (J2000)  
 $l$ : 107.66  $b$ : 44.98

DATE: 1980/106 - 1980/106  
 LIVETIME: 3284.4s  
 ROLL ANGLE: -19.0°

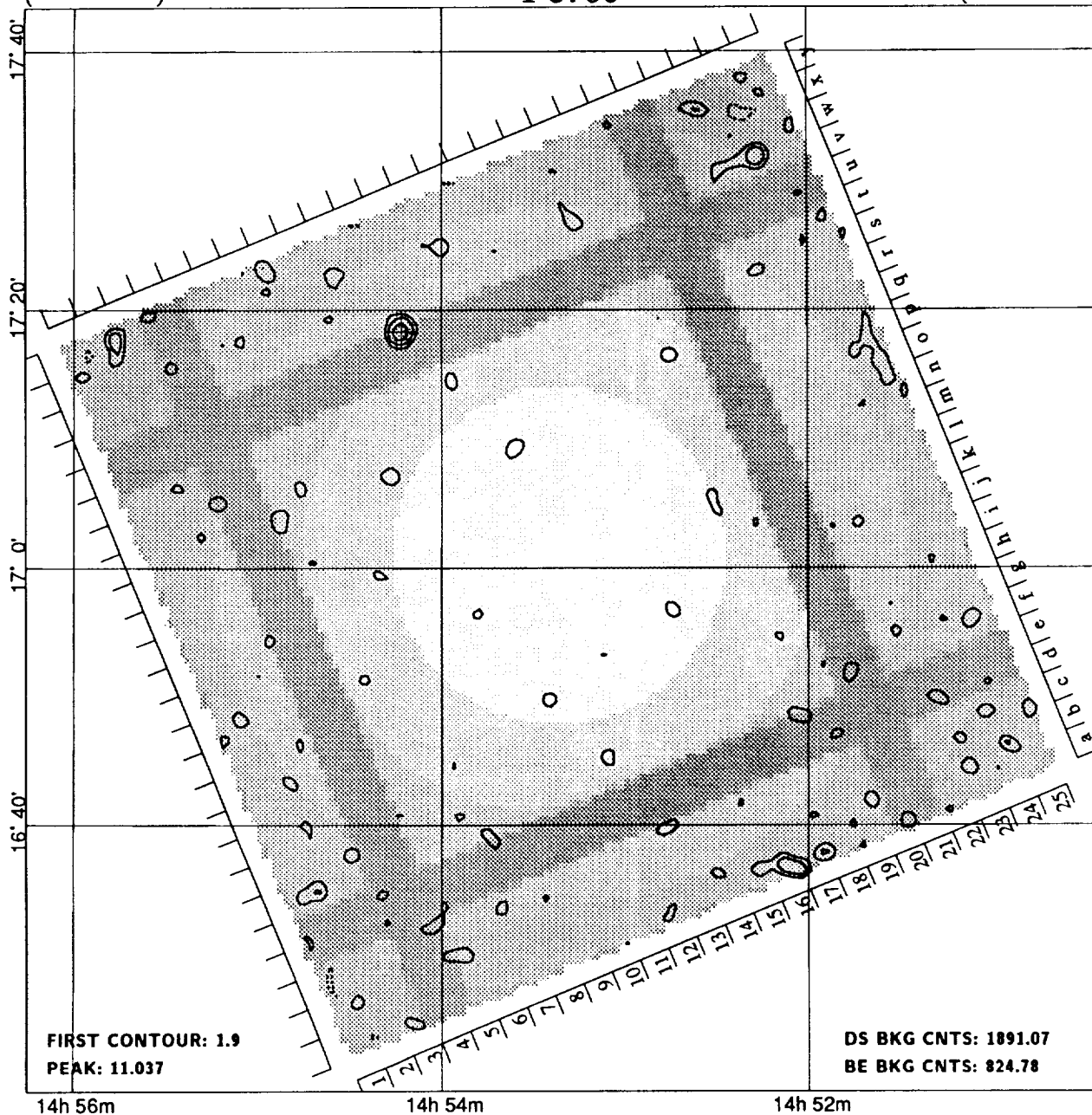
NH: 2.1E+20  
 REF/ID: CLG  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT ± RATE	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
3353	1	14 53 24.9	68 17 28	54	*0.0112 0.0030	19.5	8.5	3.7	0.9	601	18.6	H

(14h 53m)

I 5706

(14h 53m)



## BL LAC OBJECT

FIELD CENTER:  $14^h 53^m 20.0^s$   $17^\circ 01' 26''$  (B1950) $14^h 55^m 39.7^s$   $16^\circ 49' 21''$  (J2000) $l: 19.67$   $b: 59.51$ 

DATE: 1980/ 21 - 1980/ 21

LIVETIME: 1532.4s

ROLL ANGLE:  $-112.3^\circ$ NH:  $2.2E+20$ 

REF/ID:

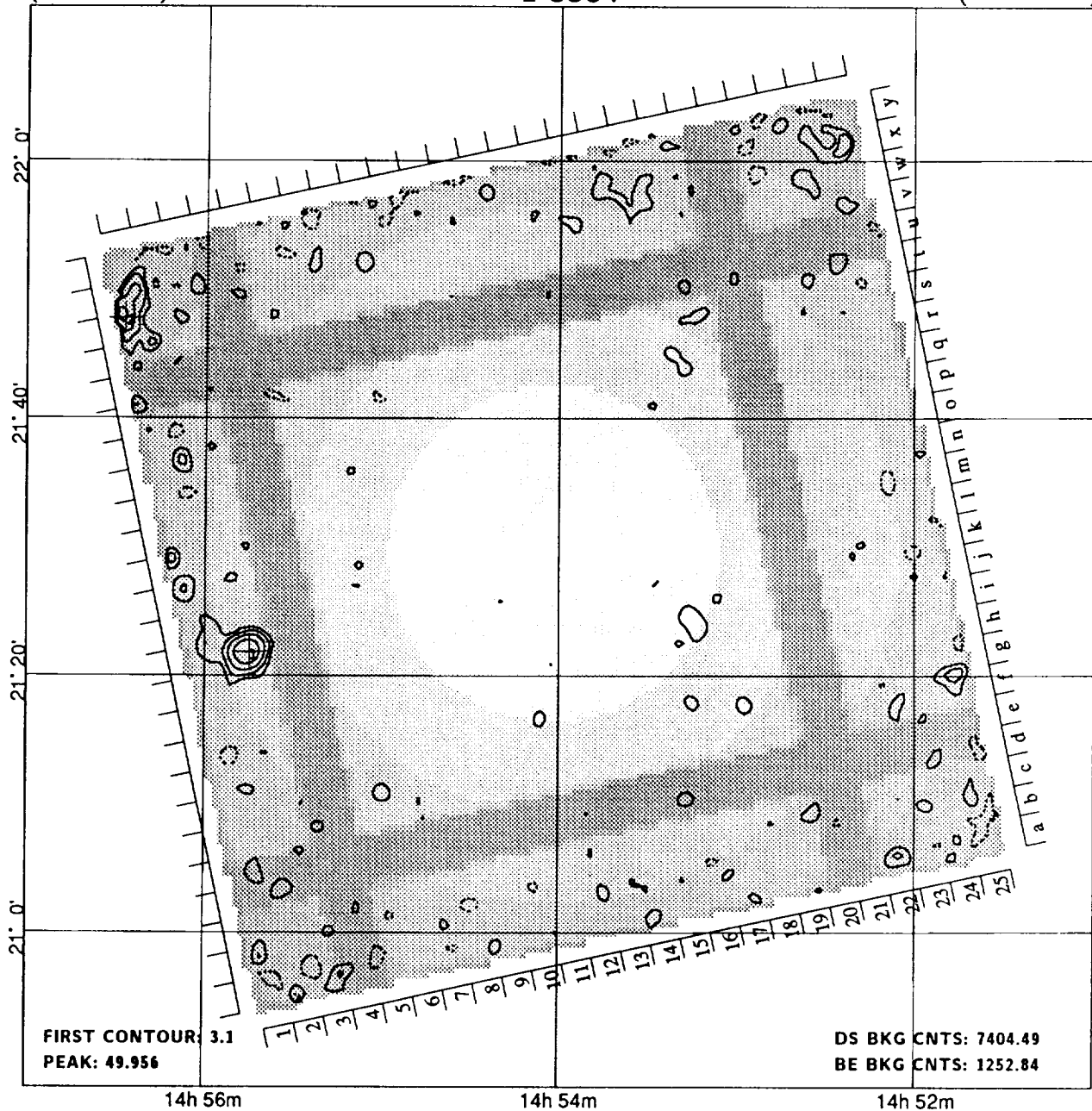
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3355	1	14 54 13.2	17 18 19	51	*0.0269	0.0064	20.1	2.9	4.2	0.7	907	21.1	

(14h 54m)

I 3584

(14h 54m)



## 4U 1456+22 SUPERCLUSTER STUDY

FIELD CENTER:  $14^{\text{h}}54^{\text{m}}00.0^{\text{s}}$   $21^{\circ}29'59''$  (B1950)  
 $14^{\text{h}}56^{\text{m}}15.6^{\text{s}}$   $21^{\circ}17'56''$  (J2000)  
 $l: 28.18$   $b: 61.03$

DATE: 1979/ 28 - 1979/ 28  
 LIVETIME: 6000.1s  
 ROLL ANGLE: -102.0°

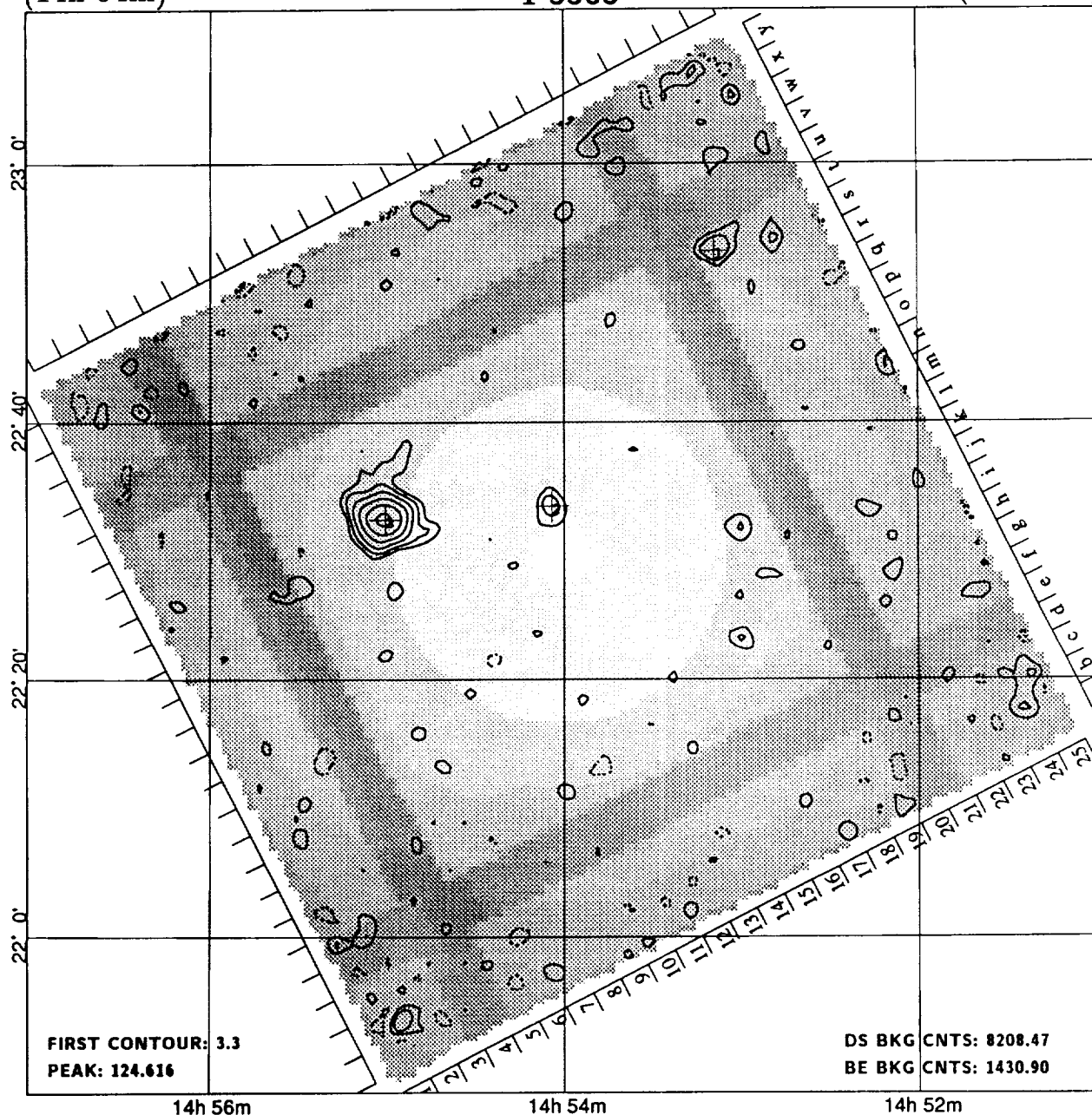
NH:  $3.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3358	1	14 55 45.0	21 21 51	48	0.0412	0.0043	105.6	15.4	9.6	1.1	300	26.0	H	
3359	2	14 56 27.5	21 47 47	53	*0.0256	0.0054	29.0	8.0	4.8	1.5	703	38.7	AH	

(14h 54m)

I 3585

(14h 54m)



FIELD CENTER:  $14^{\text{h}}54^{\text{m}}00.0^{\text{s}}$   $22^{\circ}29'59''$  (B1950)  
 $14^{\text{h}}56^{\text{m}}14.7^{\text{s}}$   $22^{\circ}17'56''$  (J2000)  
 $l: 30.17$   $b: 61.32$

DATE: 1979/ 29 - 1979/ 29  
 LIVETIME: 6651.6s  
 ROLL ANGLE:  $-117.1^{\circ}$

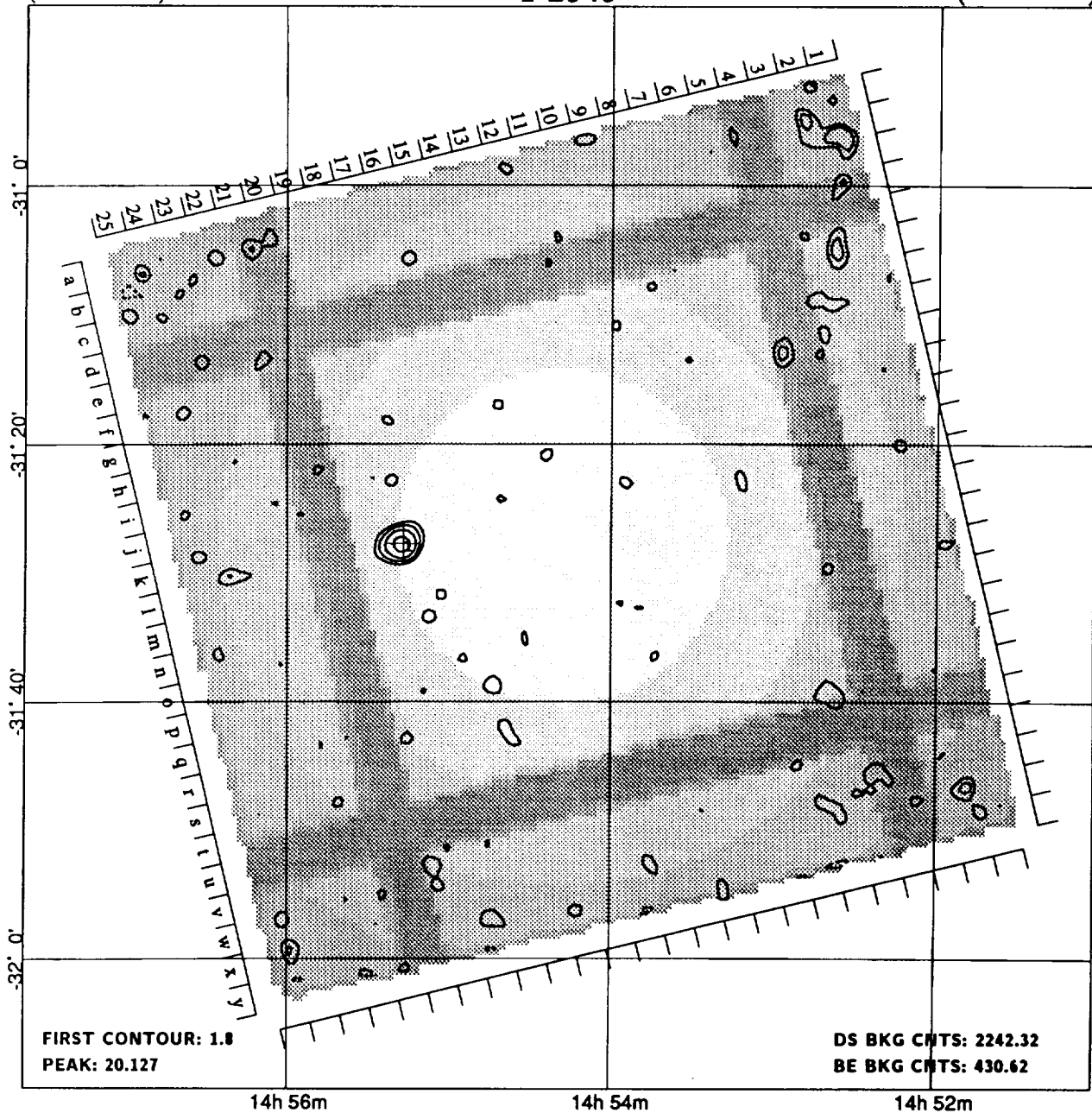
NH:  $3.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3352	1	14 53 08.8	22 53 12	52	*0.0102	0.0024	27.7	13.3	4.3	0.9	902	26.1	H	
3354	2	14 54 04.2	22 33 33	35	0.0071	0.0016	34.3	26.7	4.4	0.7	0	3.7	H	CLG
3356	3	14 55 00.8	22 32 29	37	0.1045	0.0052	422.6	18.4	20.1	1.4	0	14.2	H	

(14h 54m)

I 2949

(14h 54m)



## X-RAY TRANSIENTS AND NOVA-LIKE OBJECTS: CEN X-4

FIELD CENTER:  $14^h 54^m 19.6^s$   $-31^\circ 28' 08''$  (B1950)  
 $14^h 57^m 21.8^s$   $-31^\circ 40' 10''$  (J2000)  
 $l: 332.04$   $b: 23.99$

DATE: 1980/210 - 1980/210  
 LIVETIME: 1817.0s  
 ROLL ANGLE:  $76.4^\circ$

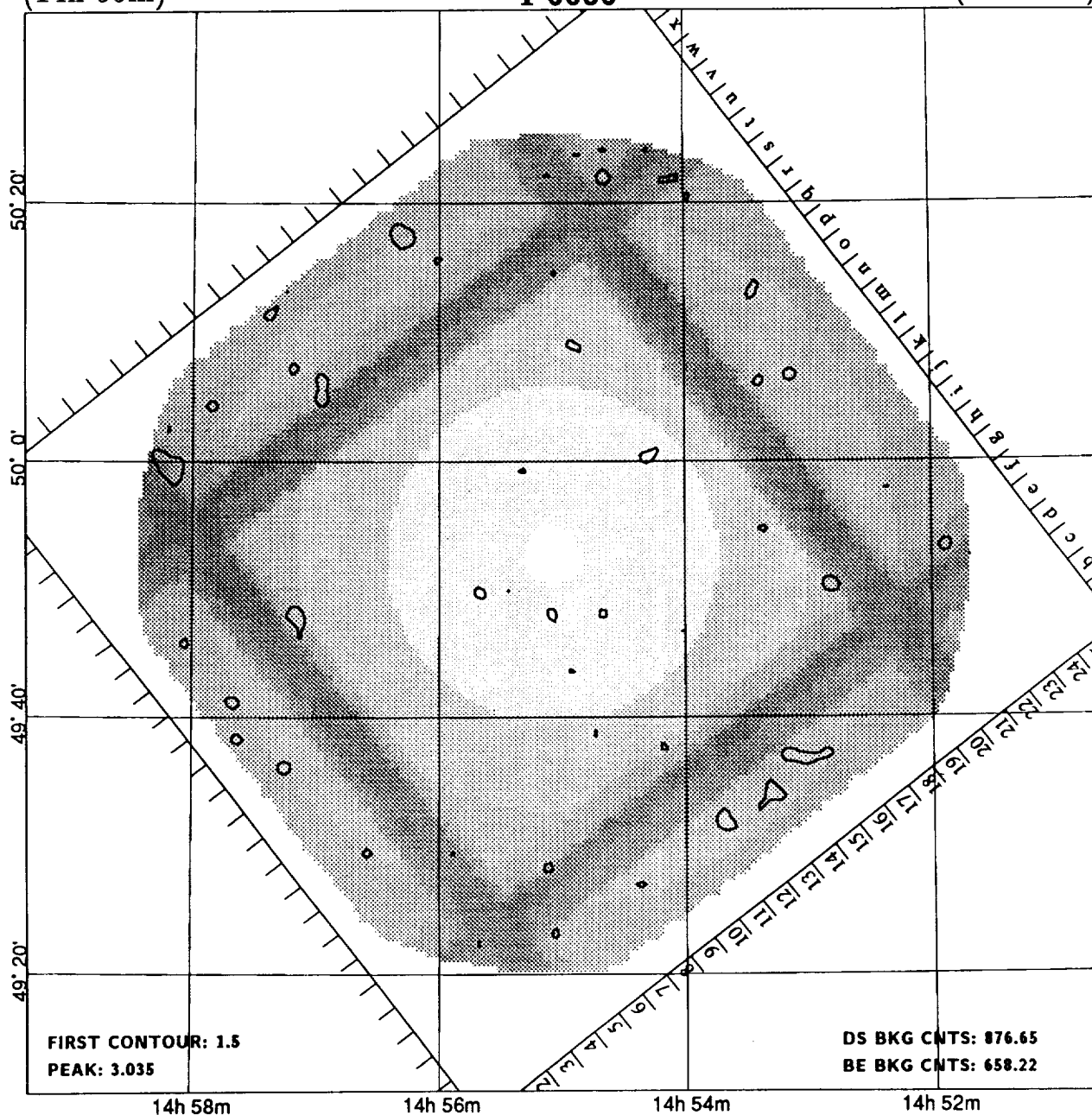
NH:  $8.4E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3357	1	14 55 17.0	-31 27 47	41	0.0553	0.0072	63.4	5.6	7.6	0.9	0	12.4	H

(14h 55m)

I 6686

(14h 55m)



GROUPS OF GALAXIES: TG 94

FIELD CENTER:  $14^h 55^m 00.0^s$   $49^\circ 52' 59''$  (B1950)  
 $14^h 56^m 38.9^s$   $49^\circ 40' 58''$  (J2000)  
 $l: 84.69$   $b: 57.11$

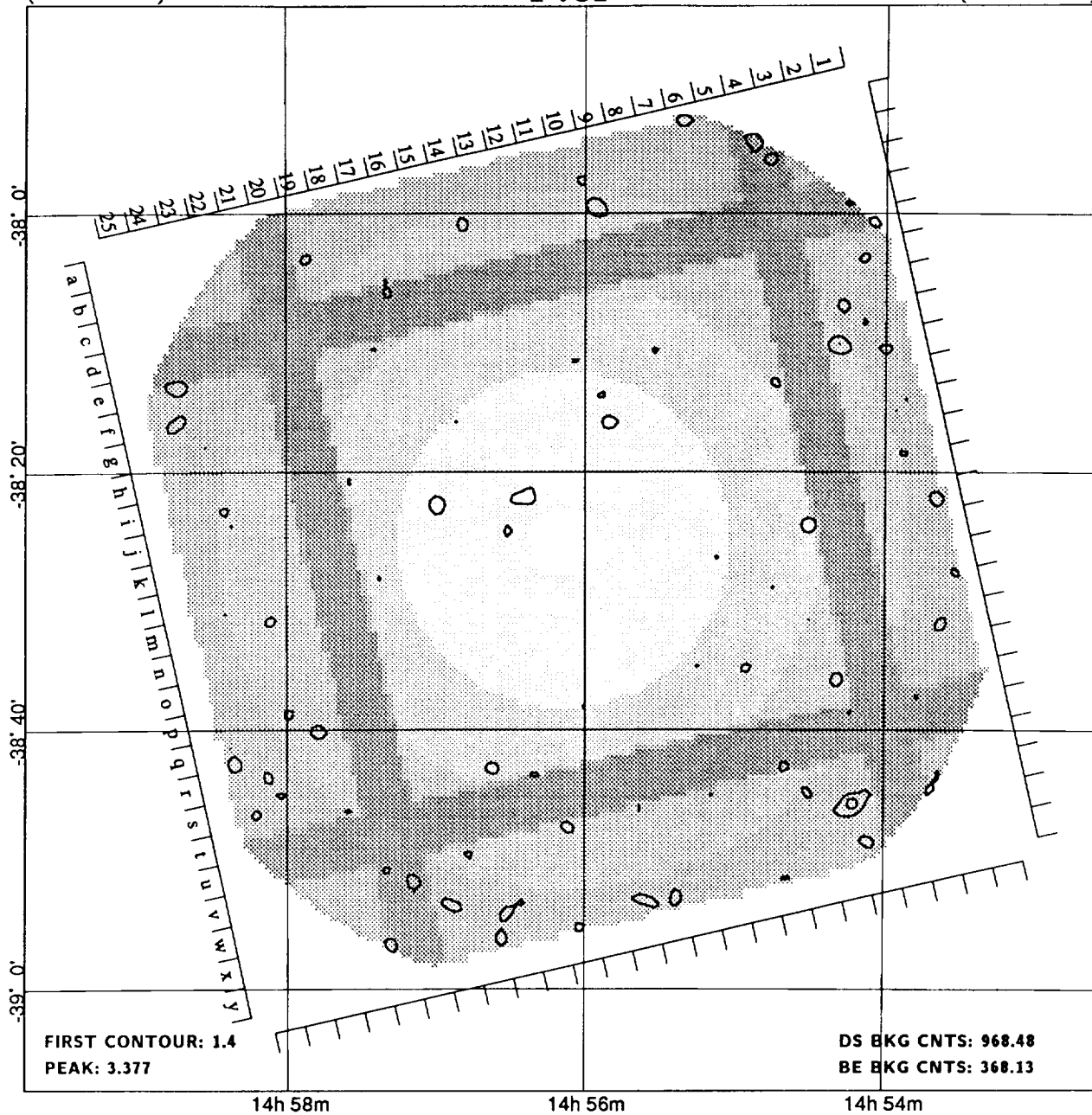
DATE: 1980/ 3 - 1980/ 3  
 LIVETIME: 710.4s  
 ROLL ANGLE:  $-127.7^\circ$

NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS:

(14h 56m)

I 751

(14h 56m)



## LUPUS LOOP SNR X-RAY STUDY

FIELD CENTER:  $14^{\text{h}}56^{\text{m}}10.0^{\text{s}}$   $-38^{\circ}25'59''$  (B1950)  
 $14^{\text{h}}59^{\text{m}}21.0^{\text{s}}$   $-38^{\circ}37'55''$  (J2000)  
 $l: 328.68$   $b: 17.76$

DATE: 1979/213 - 1979/213  
 LIVETIME: 784.8s  
 ROLL ANGLE:  $77.3^{\circ}$

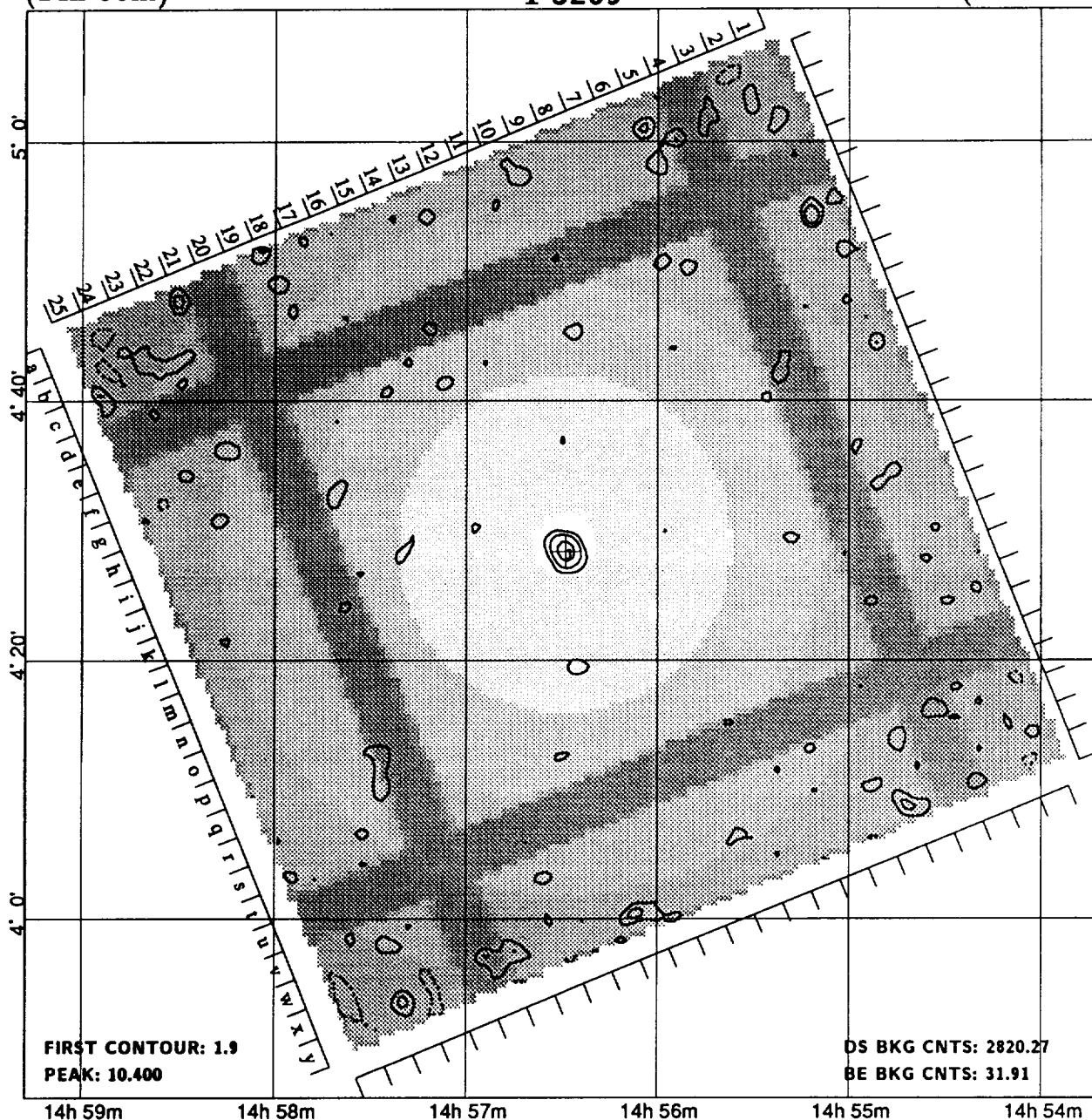
NH:  $6.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L



(14h 56m)

I 3269

(14h 56m)



**FIELD CENTER:**  $14^{\text{h}}56^{\text{m}}29.2^{\text{s}}$   $04^{\circ}28'09''$  (B1950)  
 $14^{\text{h}}58^{\text{m}}59.4^{\text{s}}$   $04^{\circ}16'14''$  (J2000)  
 $l: 1.67$   $b: 51.96$

**DATE:** 1979/202 - 1979/202  
**LIVETIME:** 2285.3s  
**ROLL ANGLE:**  $67.9^{\circ}$

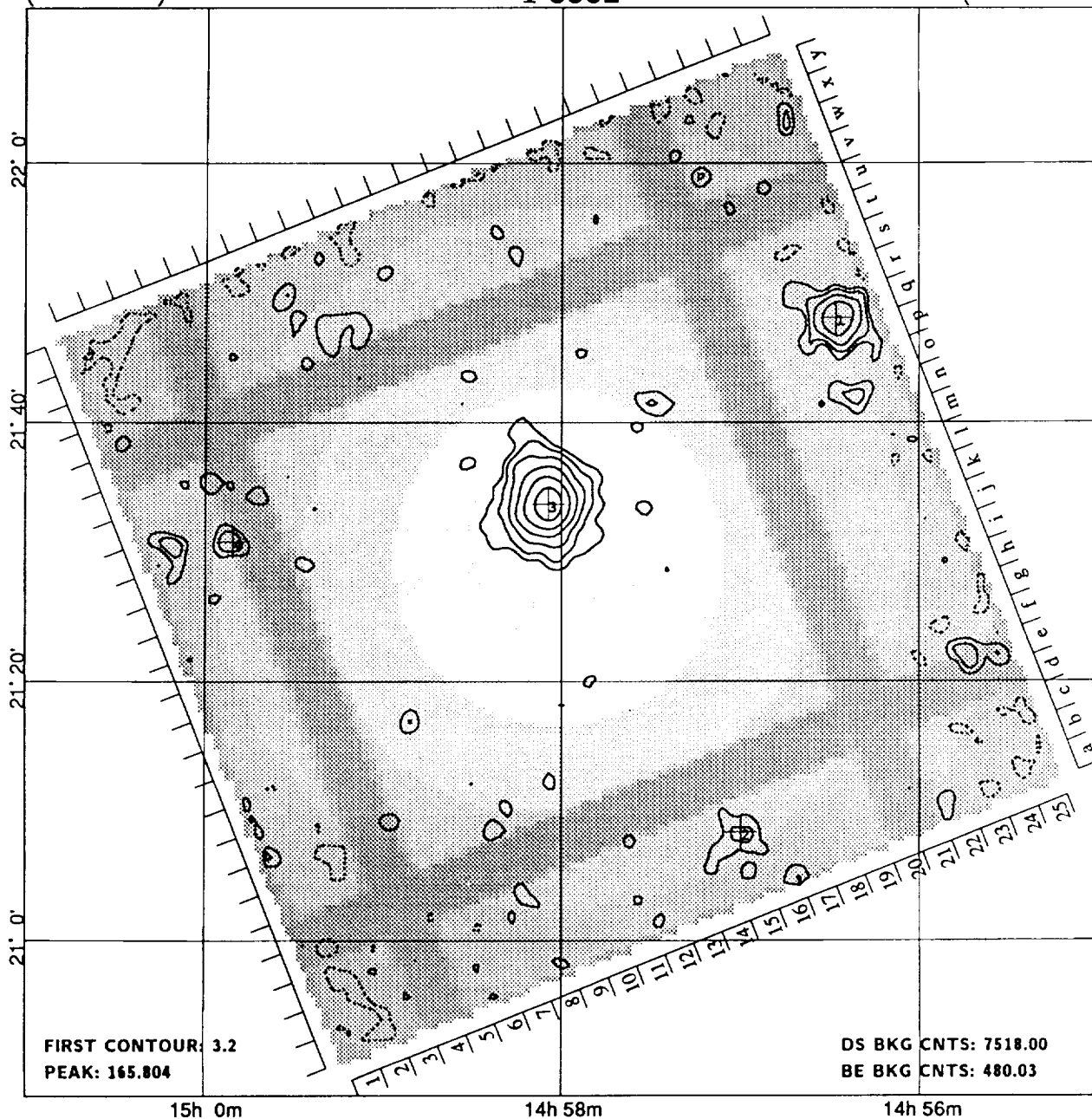
**NH:**  $3.5\text{E}+20$   
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3360	1	14 56 28.8	04 28 26	35	0.0242	0.0041	41.3	6.7	6.0	0.9	0	0.4	H	*

(14h 58m)

I 3582

(14h 58m)



## 4U 1456+22 SUPERCLUSTER STUDY

FIELD CENTER:  $14^{\text{h}}58^{\text{m}}00.0^{\text{s}}$   $21^{\circ}29'59''$  (B1950) $15^{\text{h}}00^{\text{m}}15.3^{\text{s}}$   $21^{\circ}18'08''$  (J2000) $l: 28.77$   $b: 60.14$ 

DATE: 1979/ 21 - 1979/ 22

LIVETIME: 6092.1s

ROLL ANGLE:  $-111.6^{\circ}$ NH:  $3.3\text{E}+20$ 

REF/ID:

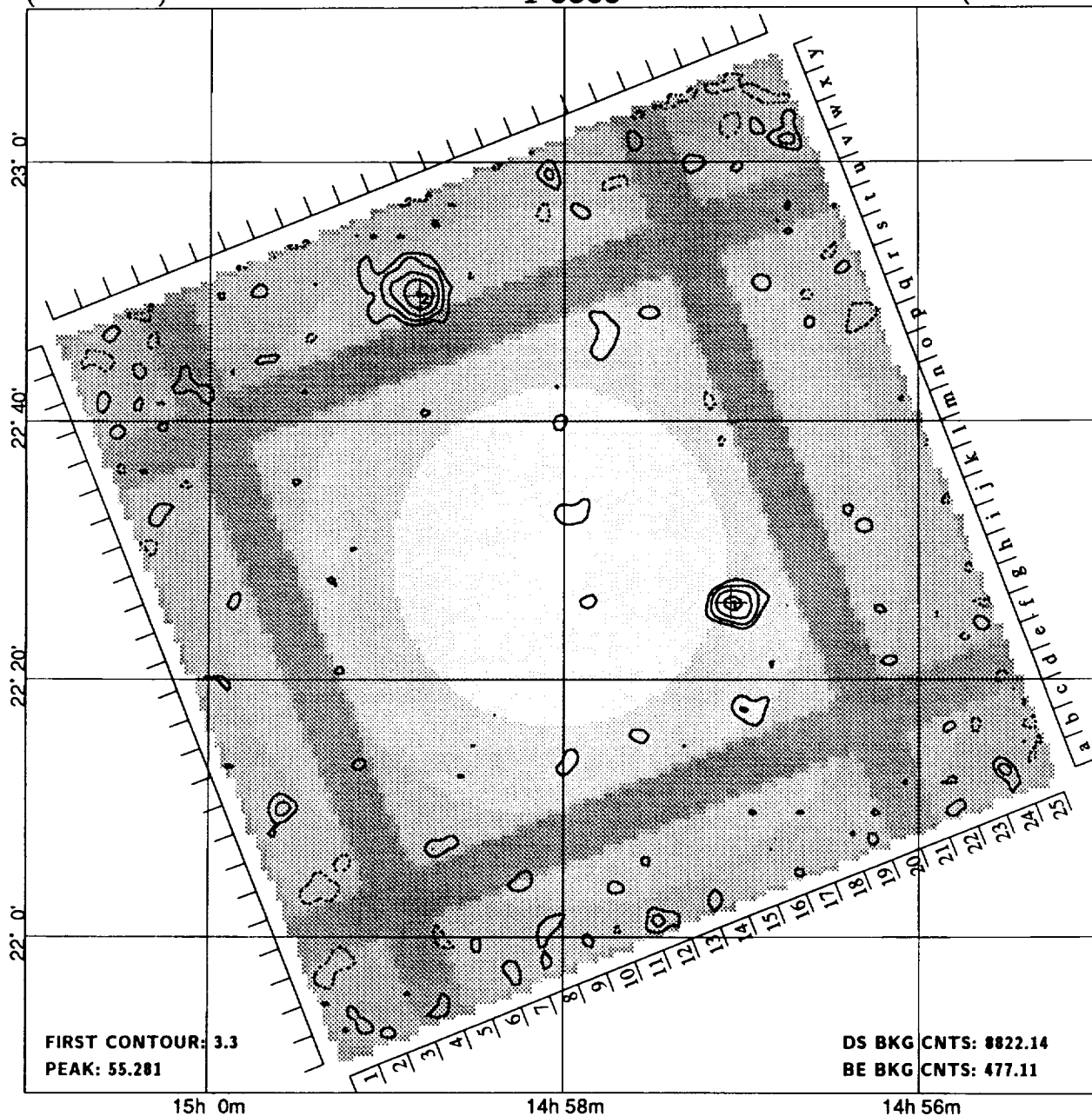
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3359	1	14 56 27.7	21 48 04	48	0.0458	0.0048	104.6	13.4	9.6	1.5	0	28.0	AH	
3361	2	14 56 59.7	21 08 21	56	0.0083	0.0023	21.5	13.5	3.6	1.3	0	25.7	H	
3363	3	14 58 04.5	21 33 44	31	0.1680	0.0063	737.1	20.9	26.8	2.0	0	4.0	H	CLG
3368	4	14 59 50.7	21 30 49	55	*0.0091	0.0023	23.2	11.8	3.9	0.8	907	25.8	A	

(14h 58m)

I 3583

(14h 58m)



## 4U 1456+22 SUPERCLUSTER STUDY

FIELD CENTER:  $14^{\text{h}}58^{\text{m}}00.0^{\text{s}}$   $22^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}00^{\text{m}}14.3^{\text{s}}$   $22^{\circ}18'08''$  (J2000)  
 $\ell$ : 30.70  $b$ : 60.44

DATE: 1979/ 22 - 1979/ 22  
 LIVETIME: 7148.9s  
 ROLL ANGLE:  $-111.6^{\circ}$

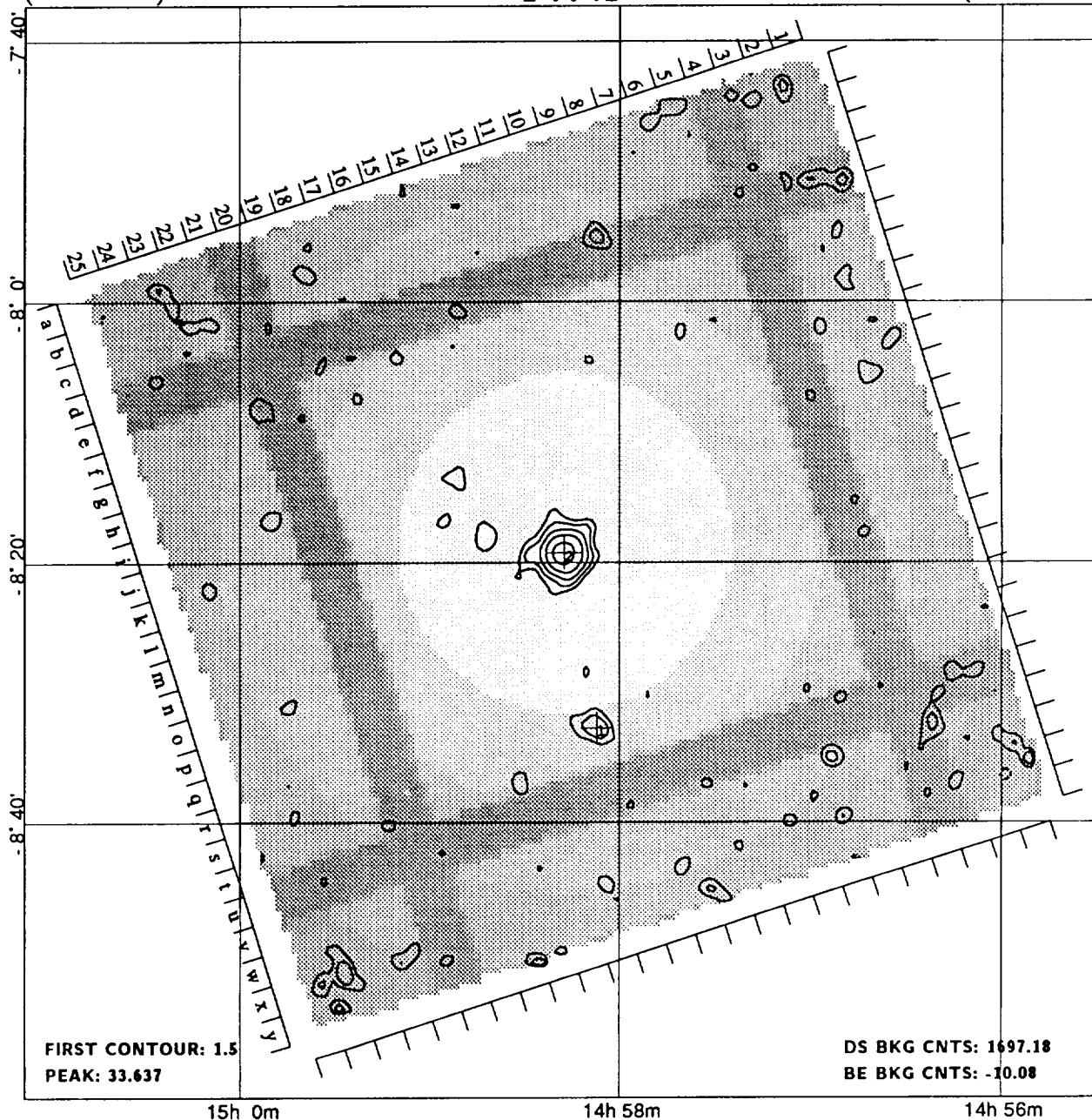
NH:  $3.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3362	1	14 57 03.4	22 25 59	38	0.0237	0.0025	103.0	18.0	9.4	1.1	0	13.6	H S	
3366	2	14 58 49.1	22 49 44	48	0.0390	0.0036	128.6	14.4	10.8	1.5	300	22.9	H	

(14h 58m)

I 7741

(14h 58m)



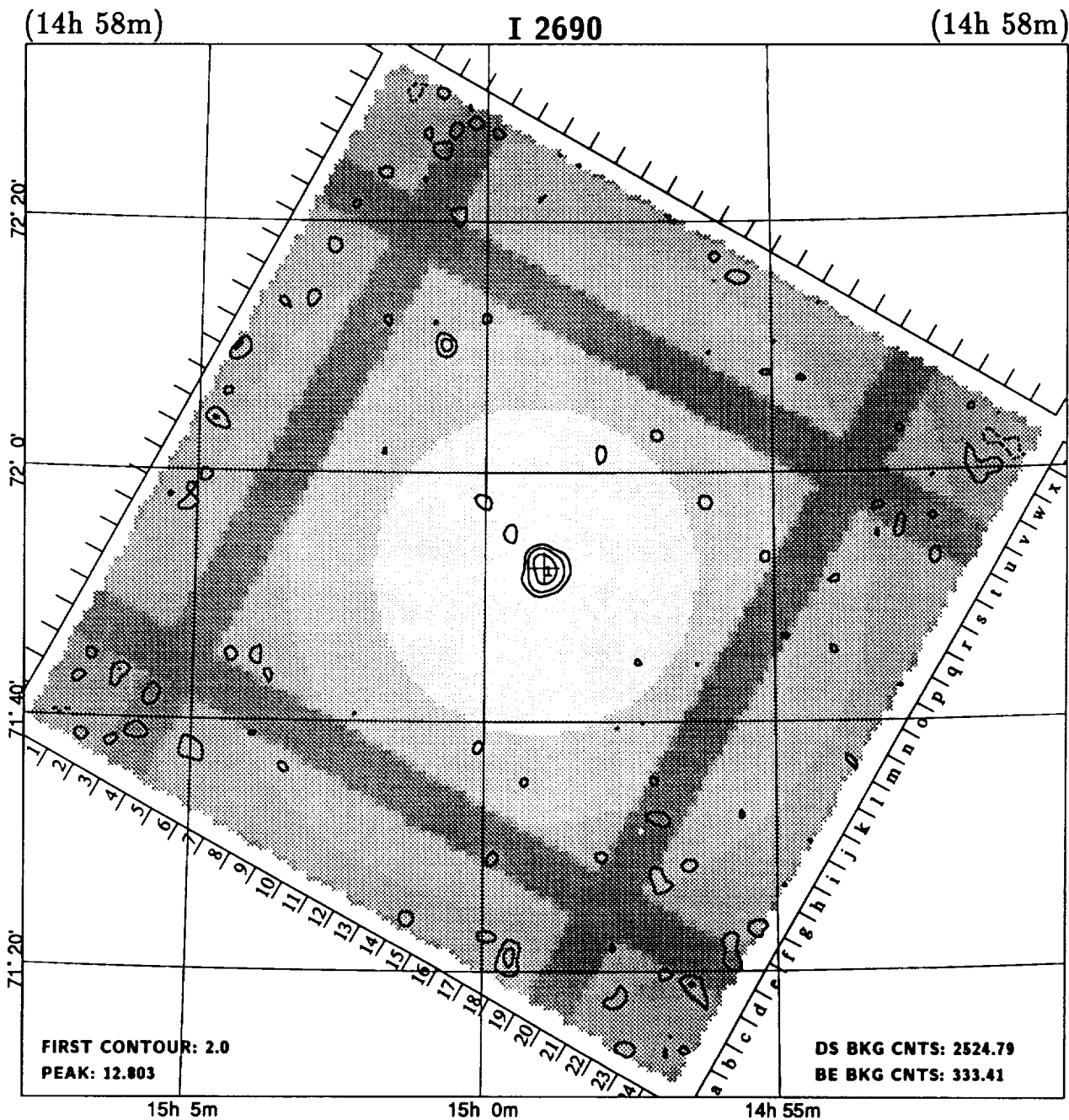
## HD 132742, INTERACTING CLOSE BINARY SYSTEMS

FIELD CENTER:  $14^{\text{h}}58^{\text{m}}18.0^{\text{s}}$   $-08^{\circ}19'17''$  (B1950)  
 $15^{\text{h}}00^{\text{m}}58.7^{\text{s}}$   $-08^{\circ}31'07''$  (J2000)  
 $\ell: 348.87$   $b: 42.51$

DATE: 1980/212 - 1980/212  
 LIVETIME: 1375.3s  
 ROLL ANGLE:  $72.3^{\circ}$

NH:  $7.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3364	1	14 58 07.1	-08 32 45	46	0.0185	0.0053	15.4	3.6	3.5	0.8	0	13.4	H	
3365	2	14 58 17.5	-08 19 15	31	0.150	0.012	154.0	4.0	12.2	1.3	0	0.2	H	S



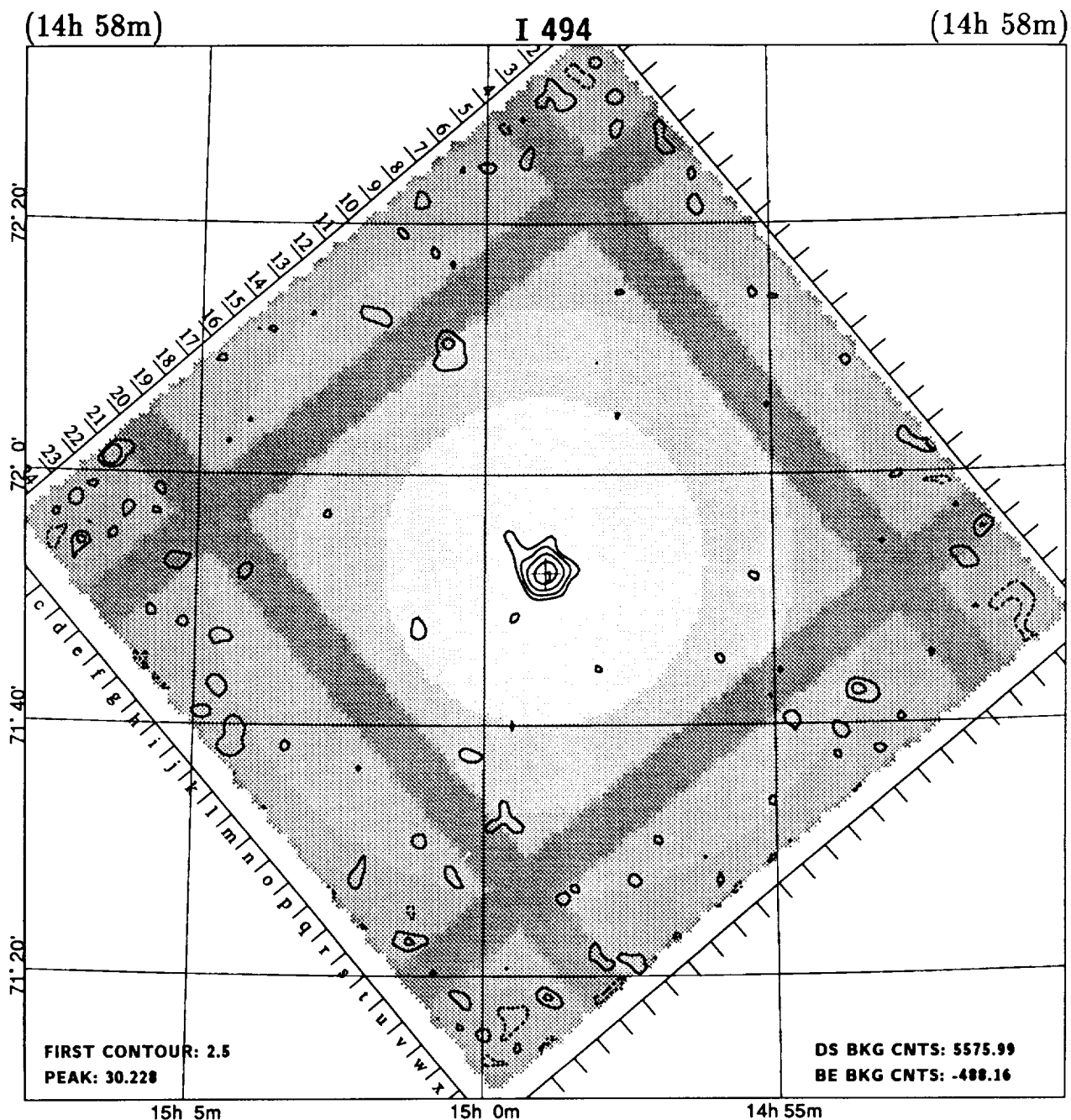
**3C 309.1: BRIGHT X-GALACTIC RADIO SOURCES**

FIELD CENTER: 14<sup>h</sup>58<sup>m</sup>56.6<sup>s</sup> 71°52'10" (B1950)  
 14<sup>h</sup>59<sup>m</sup>07.5<sup>s</sup> 71°40'19" (J2000)  
 $l$ : 109.98  $b$ : 42.10

DATE: 1979/ 66 - 1979/ 66  
 LIVETIME: 2045.9s  
 ROLL ANGLE: -60.7°

NH: 2.3E+20  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3367	1	14 58 59.0	71 52 25	35	0.0360	0.0052	54.9	7.1	7.0	1.2	0	0.4	AH	Q



3CR 309.1 (QSO 1458+718) QUASAR SURVEY

FIELD CENTER: 14<sup>h</sup>58<sup>m</sup>58.0<sup>s</sup> 71°52'11" (B1950)  
14<sup>h</sup>59<sup>m</sup>08.9<sup>s</sup> 71°40'20" (J2000)  
 $l$ : 109.98  $b$ : 42.10

DATE: 1979/171 - 1979/171  
LIVETIME: 4518.4s  
ROLL ANGLE: 50.1°

NH: 2.3E+20  
REF/ID:  
FIELD FLAGS:

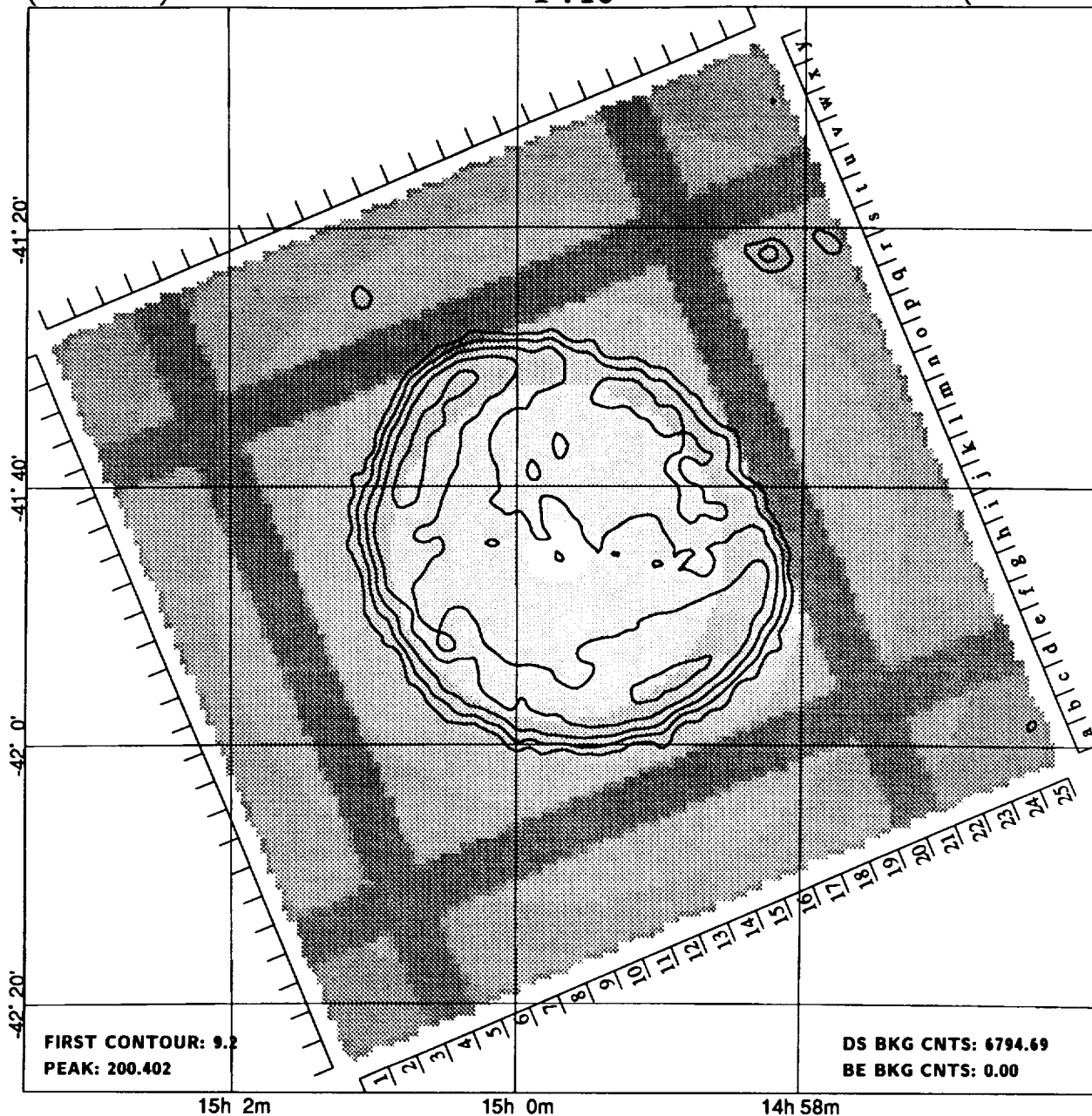
CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3367	1	14 58 57.0	71 52 05	31	0.0383	0.0035	128.8	12.2	10.8	1.2	0	0.2	AH	Q



(14h 59m)

I 716

(14h 59m)



## SN 100% SMALL SNR SURFACE BRIGHTNESS

FIELD CENTER:  $14^h 59^m 40.0^s$   $-41^\circ 44' 59''$  (B1950)  
 $15^h 02^m 56.3^s$   $-41^\circ 56' 44''$  (J2000)  
 $l: 327.58$   $b: 14.55$

DATE: 1979/ 56 - 1979/ 56  
 LIVETIME: 5505.9s  
 ROLL ANGLE:  $-112.9^\circ$

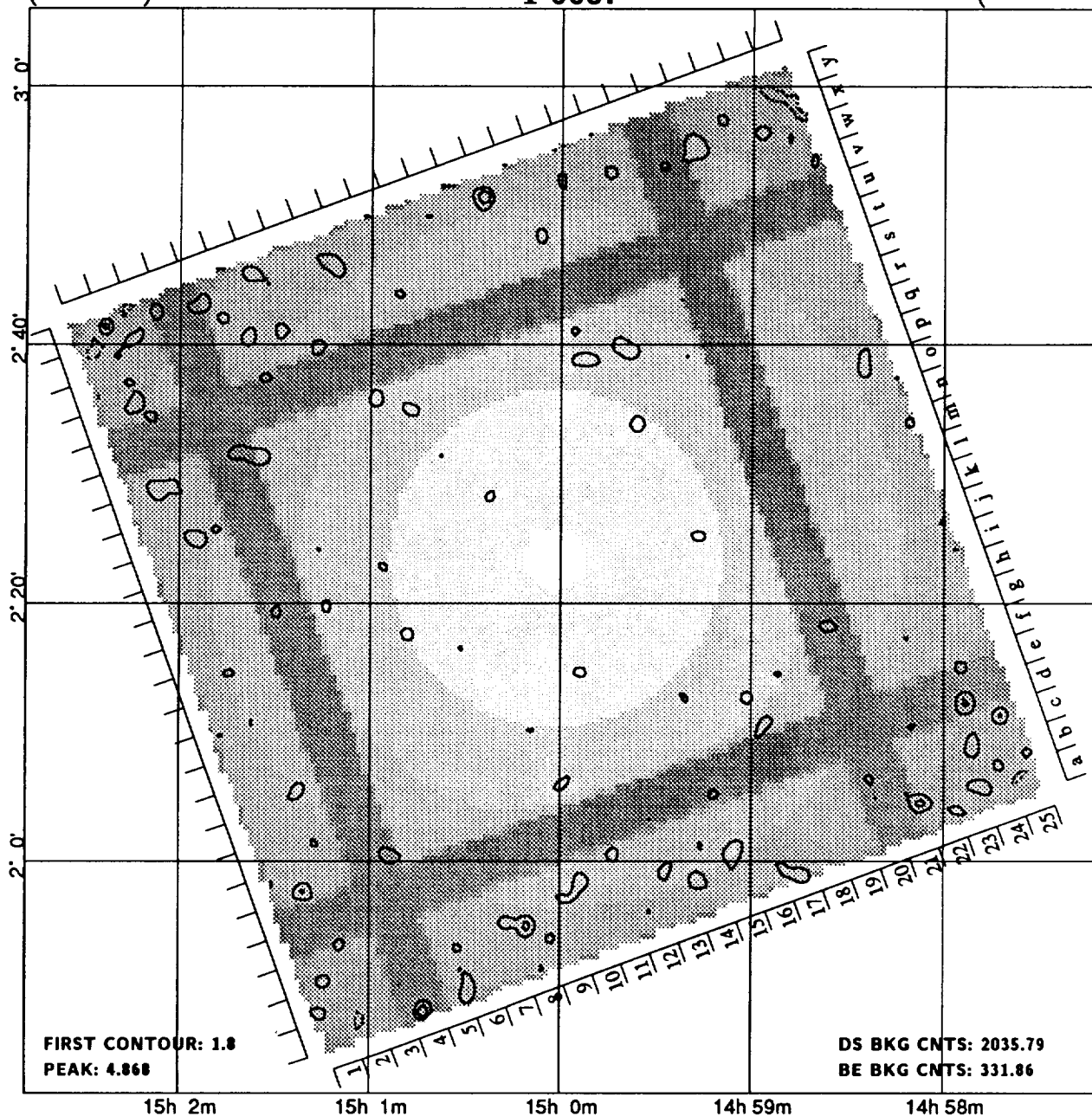
NH:  $6.3E+20$   
 REF/ID: SNR  
 FIELD FLAGS: DLS



(15h 0m)

I 6687

(15h 0m)

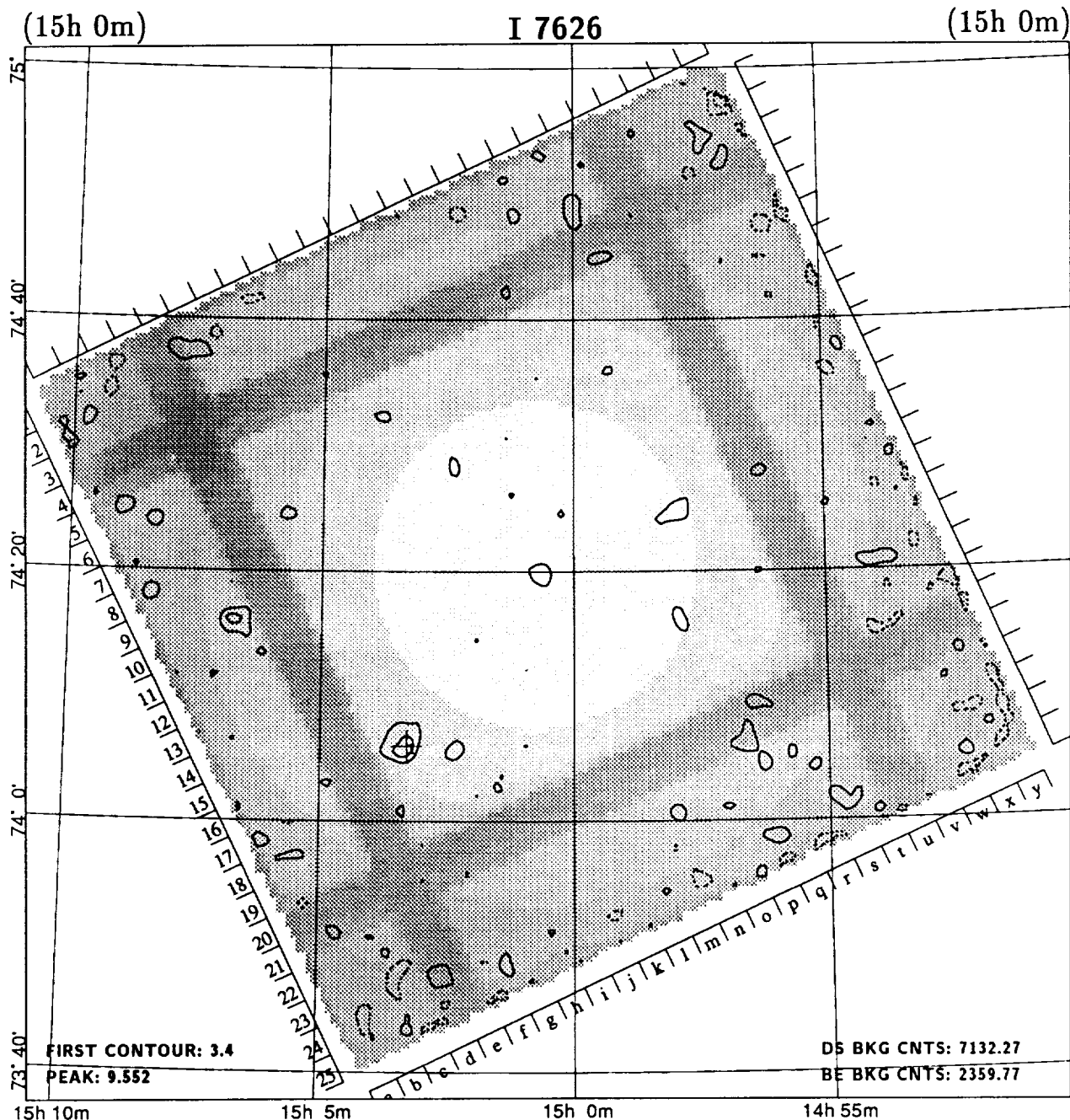


GROUPS OF GALAXIES: TG 95

FIELD CENTER:  $15^{\text{h}}00^{\text{m}}00.0^{\text{s}}$   $02^{\circ}23'59''$  (B1950)  
 $15^{\text{h}}02^{\text{m}}31.8^{\text{s}}$   $02^{\circ}12'15''$  (J2000)  
 $l$ : 0.11  $b$ : 49.93

DATE: 1980/ 18 - 1980/ 18  
 LIVETIME: 1649.7s  
 ROLL ANGLE:  $-109.9^{\circ}$

NH:  $4.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



4C74.20, RADIO SOURCES WITH STEEP SPECTRA

FIELD CENTER: 15<sup>h</sup>00<sup>m</sup>30.0<sup>s</sup> 74°19'59" (B1950)  
15<sup>h</sup>00<sup>m</sup>16.1<sup>s</sup> 74°08'12" (J2000)  
 $l$ : 111.95  $b$ : 40.12

DATE: 1980/102 - 1980/102  
LIVETIME: 5779.5s  
ROLL ANGLE: -25.2°

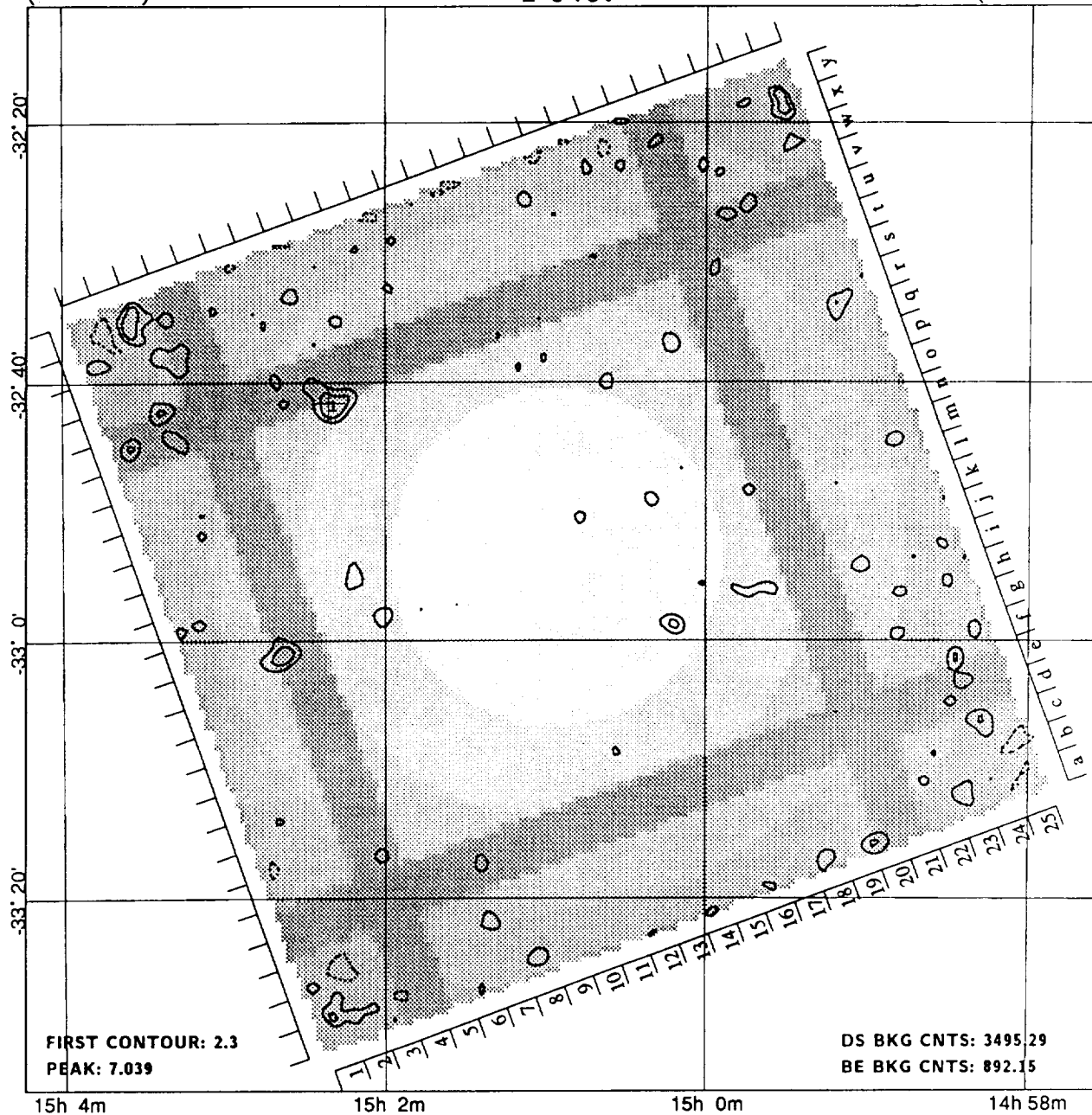
NH: 2.4E+20  
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3379	1	15 03 17.8	74 06 04	52	0.0097	0.0023	30.6	20.4	4.3	1.0	0	17.8	H	

(15h 0m)

I 6407

(15h 0m)



## NGC 5824, GLOBULAR CLUSTER SURVEY

FIELD CENTER:  $15^{\text{h}}00^{\text{m}}54.0^{\text{s}}$   $-32^{\circ}52'59''$  (B1950)  
 $15^{\text{h}}03^{\text{m}}58.7^{\text{s}}$   $-33^{\circ}04'41''$  (J2000)  
 $l: 332.55$   $b: 22.06$

DATE: 1980/ 53 - 1980/ 53  
 LIVETIME: 2832.3s  
 ROLL ANGLE:  $-109.8^{\circ}$

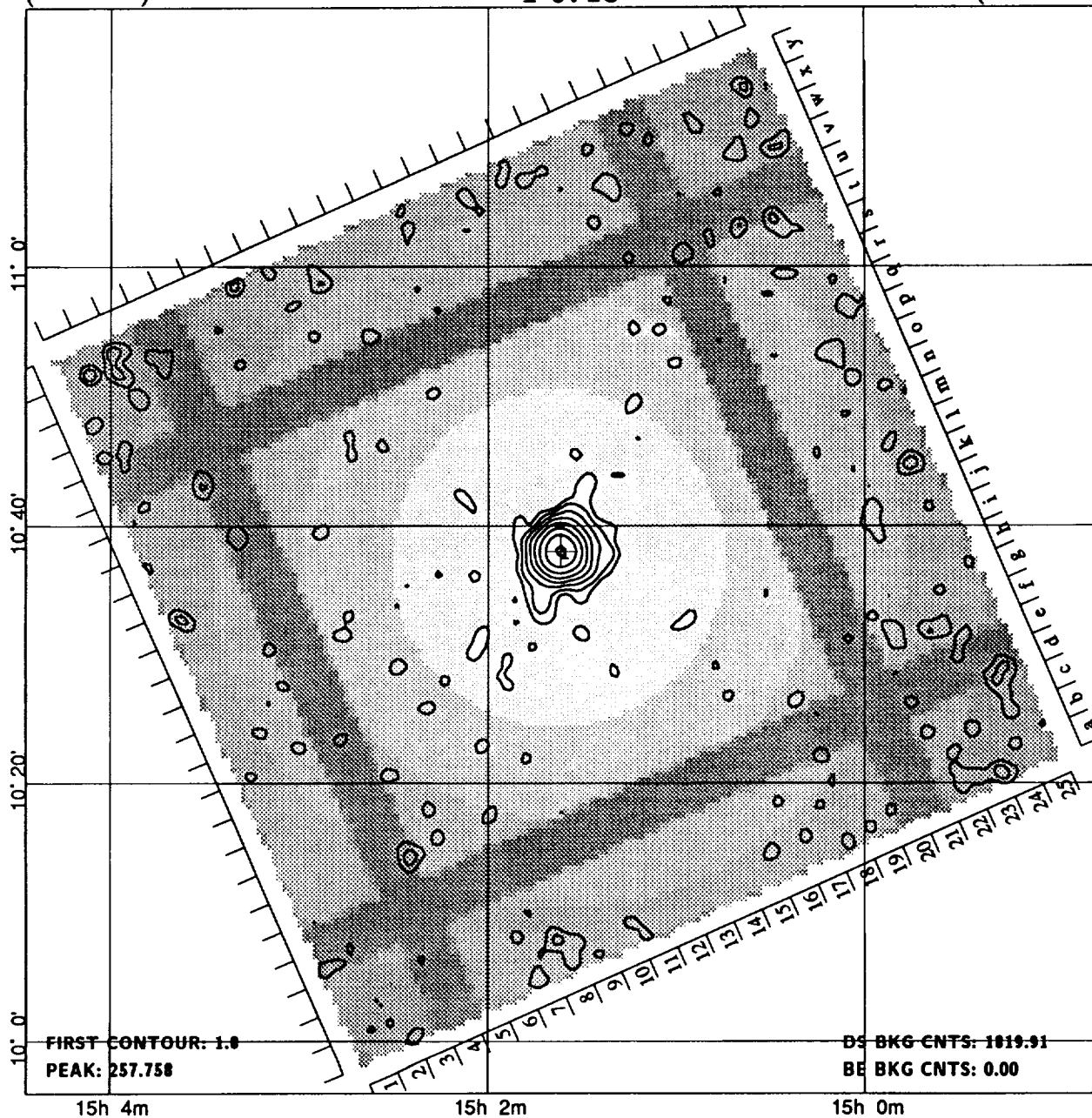
NH:  $9.9\text{E}+20$   
 REF/ID: GLB  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3374	1	15 02 21.1	-32 41 38	55	*0.0156	0.0039	21.6	7.4	4.0	1.0	905	21.5	H

(15h 1m)

I 6713

(15h 1m)



SEYFERT SURVEY: MKN 841

FIELD CENTER:  $15^{\text{h}}01^{\text{m}}36.0^{\text{s}}$   $10^{\circ}37'59''$  (B1950) $15^{\text{h}}04^{\text{m}}00.8^{\text{s}}$   $10^{\circ}26'20''$  (J2000) $l: 11.21$   $b: 54.63$ 

DATE: 1980/ 18 - 1980/ 18

LIVETIME: 1474.7s

ROLL ANGLE:  $-113.8^{\circ}$ NH:  $2.4\text{E}+20$ 

REF/ID:

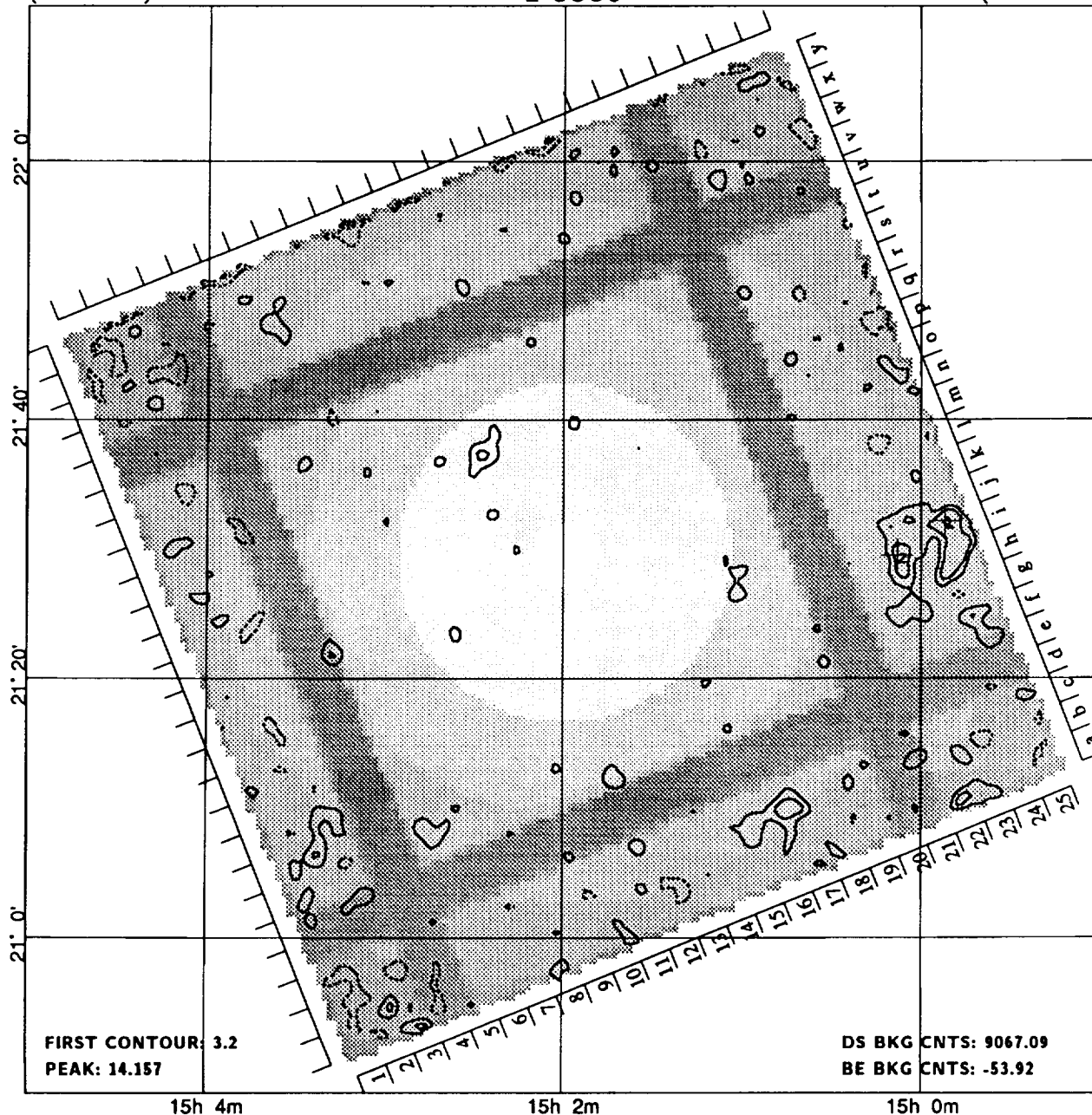
FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3372	1L	15 01 36.9	10 38 02	31	0.898	0.035	986.8	140.2	25.7	1.4	0	0.3	A	Q

(15h 2m)

I 3580

(15h 2m)



FIELD CENTER:  $15^{\text{h}}02^{\text{m}}00.0^{\text{s}}$   $21^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}04^{\text{m}}15.0^{\text{s}}$   $21^{\circ}18'21''$  (J2000)  
 $l: 29.33$   $b: 59.26$

DATE: 1979/ 22 - 1979/ 22  
 LIVETIME: 7347.4s  
 ROLL ANGLE:  $-111.9^{\circ}$

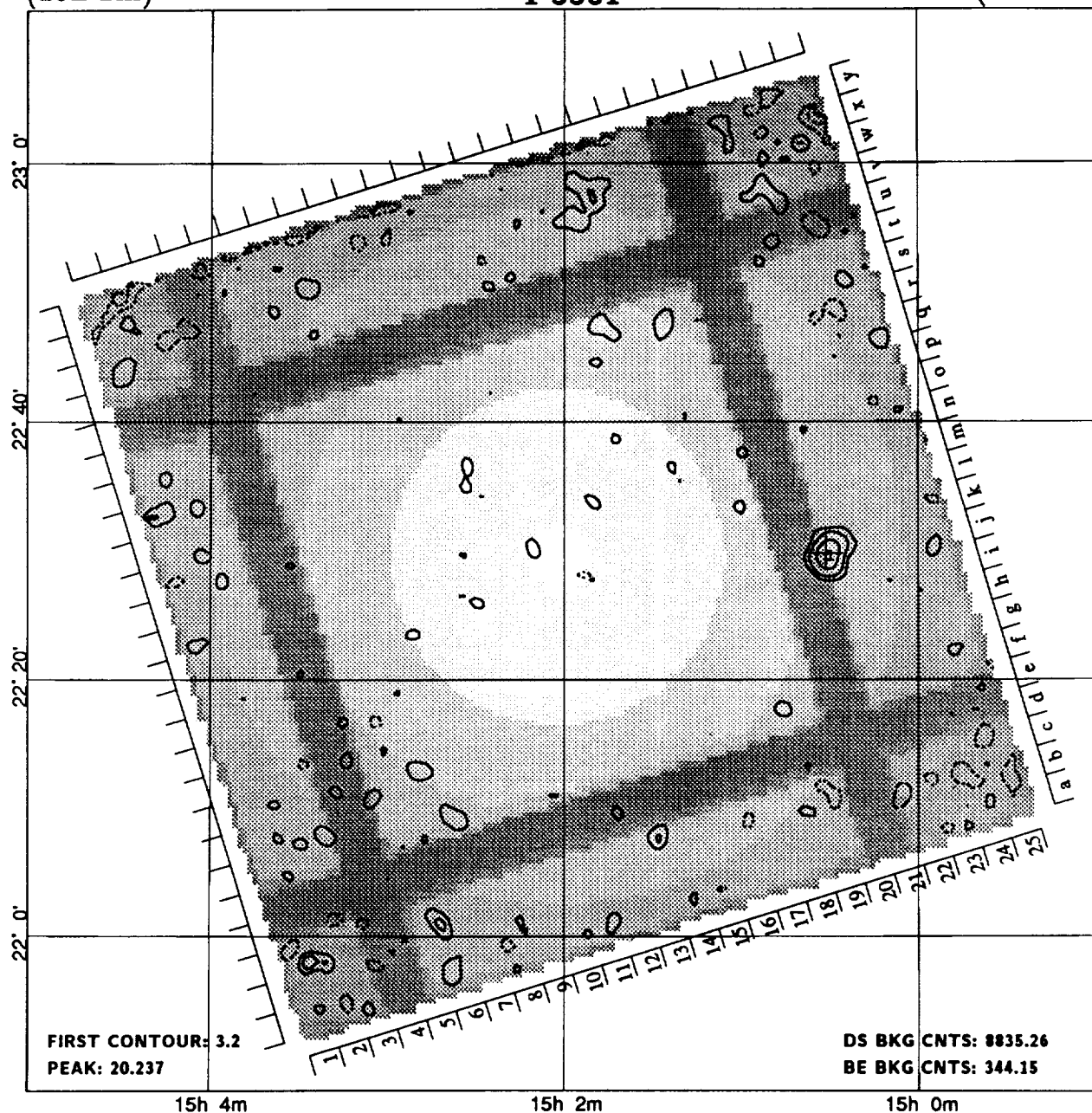
NH:  $3.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3368	1	14 59 52.0	21 32 14	55	0.0092	0.0024	23.7	14.3	3.8	3.2	300	30.3	AH	
3369	2	15 00 07.9	21 29 34	62	0.0070	0.0019	21.5	12.5	3.7	4.5	0	26.3	H	

(15h 2m)

I 3581

(15h 2m)



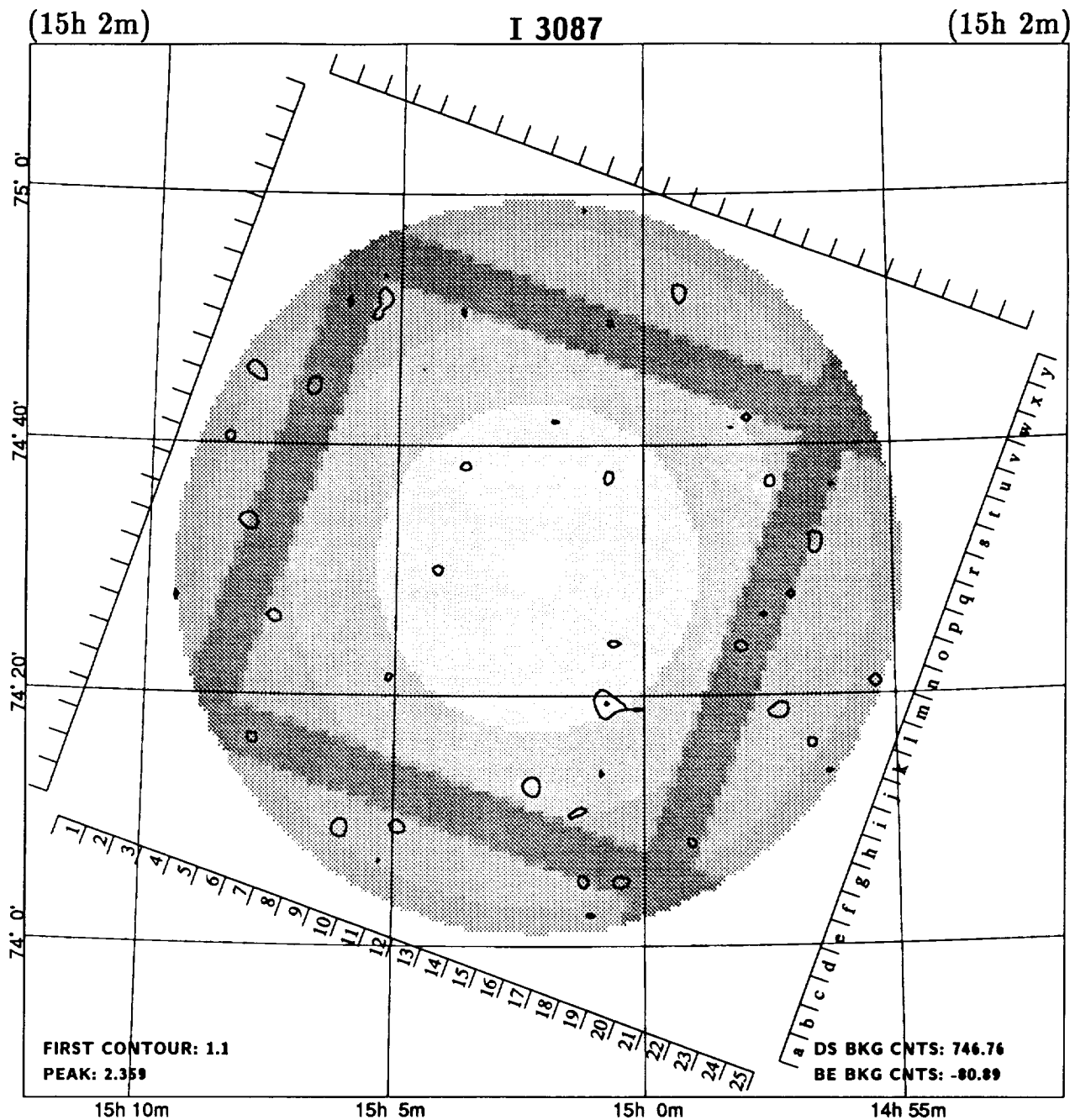
## 4U 1456+22 SUPERCLUSTER STUDY

FIELD CENTER:  $15^{\text{h}}02^{\text{m}}00.0^{\text{s}}$   $22^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}04^{\text{m}}14.0^{\text{s}}$   $22^{\circ}18'21''$  (J2000)  
 $l$ : 31.21  $b$ : 59.55

DATE: 1979/ 22 - 1979/ 22  
 LIVETIME: 7159.5s  
 ROLL ANGLE:  $-107.1^{\circ}$

NH:  $3.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3370	1	15 00 31.2	22 29 51	50	*0.0167	0.0024	58.9	13.1	6.9	1.3	1007	20.1	H	



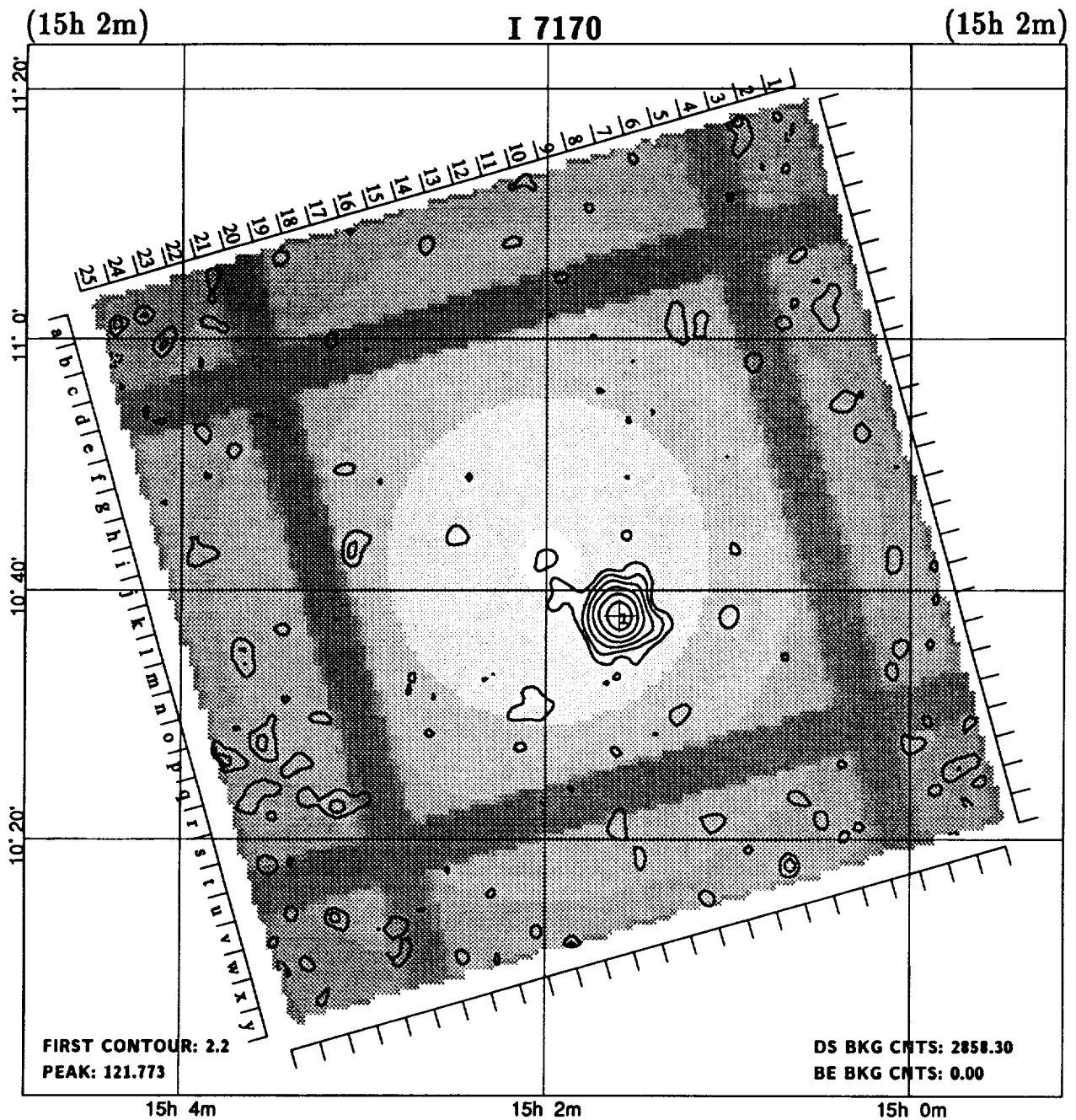
RADIO SOURCES WITH STEEP SPECTRA: 4C74.20

FIELD CENTER:  $15^{\text{h}}02^{\text{m}}00.0^{\text{s}}$   $74^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}01^{\text{m}}43.2^{\text{s}}$   $74^{\circ}18'16''$  (J2000)  
 $l$ : 111.98  $b$ : 39.93

DATE: 1979/ 56 - 1979/ 56  
LIVETIME: 605.1s  
ROLL ANGLE:  $-70.0^{\circ}$

NH:  $2.5\text{E}+20$   
REF/ID:  
FIELD FLAGS:





OR 103, BURSTING RADIO SOURCE

FIELD CENTER:  $15^h 02^m 00.2^s$   $10^\circ 41' 34''$  (B1950)  
 $15^h 04^m 25.0^s$   $10^\circ 29' 56''$  (J2000)  
 $l: 11.39$   $b: 54.58$

DATE: 1980/220 - 1980/220  
 LIVETIME: 2316.2s  
 ROLL ANGLE:  $74.2^\circ$

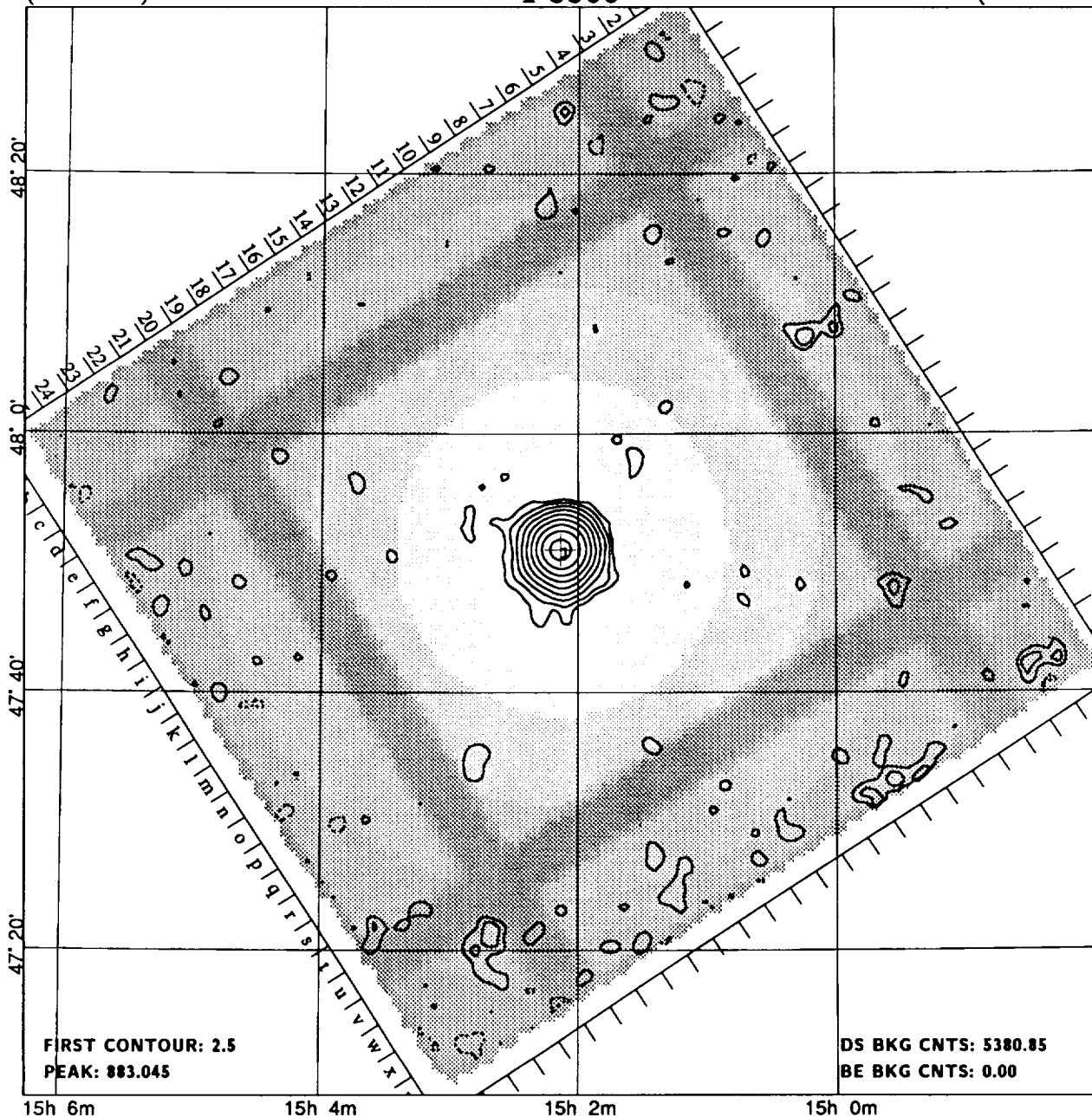
NH:  $2.4E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3372	1L	15 01 35.7	10 37 59	37	0.257	0.016	413.0	93.0	15.8	1.5	0	7.0	A	Q

(15h 2m)

I 3366

(15h 2m)



FIELD CENTER:  $15^h 02^m 08.0^s$   $47^\circ 50' 52''$  (B1950)  
 $15^h 03^m 49.1^s$   $47^\circ 39' 13''$  (J2000)  
 $l: 80.37$   $b: 57.06$

DATE: 1979/192 - 1979/192  
 LIVETIME: 4360.3s  
 ROLL ANGLE:  $57.0^\circ$

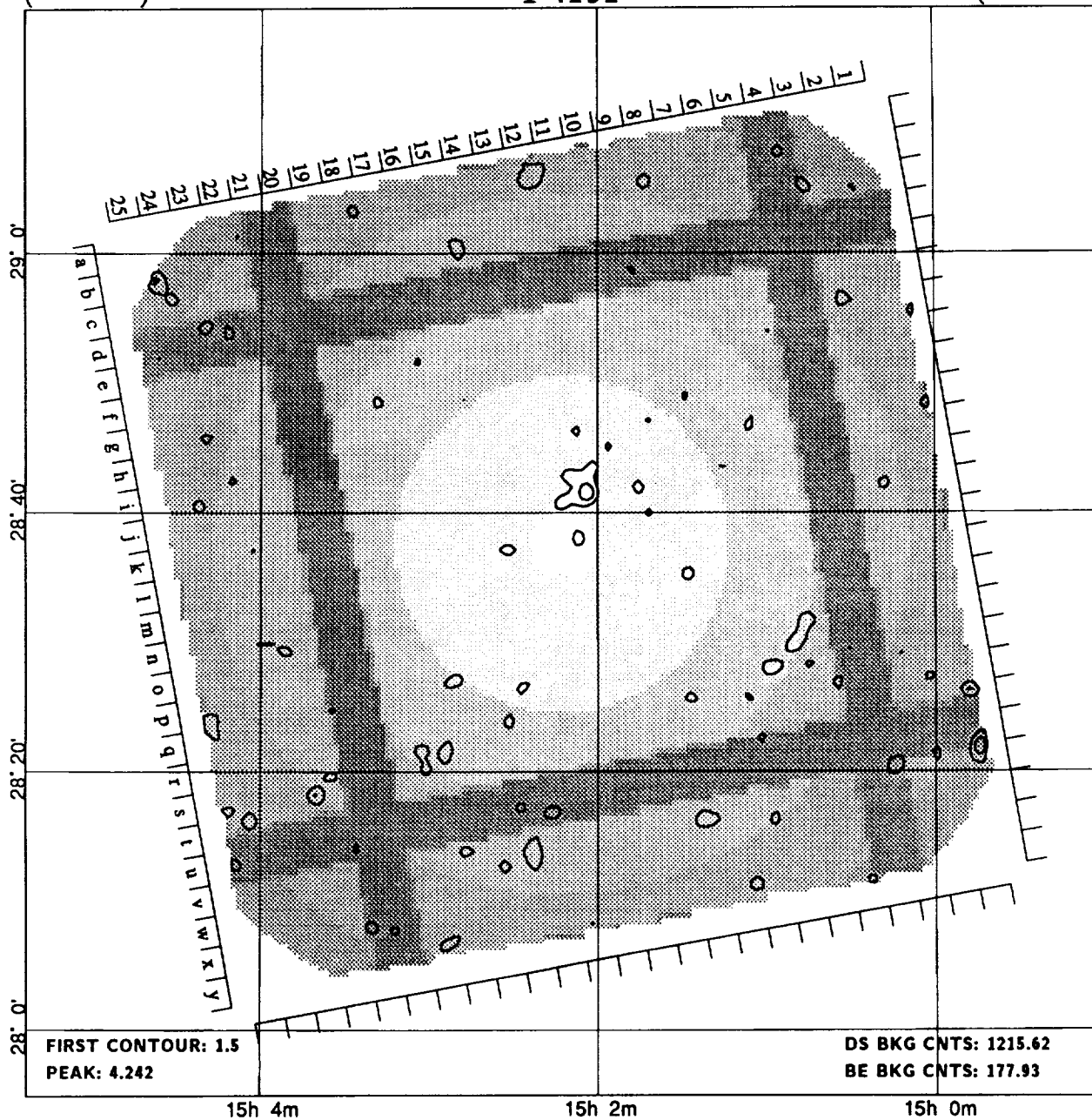
NH:  $2.3E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3373	1L	15 02 08.2	47 51 00	31	1.028	0.022	3342.4	693.6	45.6	1.4	0	0.1	S	

(15h 2m)

I 4191

(15h 2m)



## A 2022, CLUSTER WITH WELL-STUDIED OPTICAL PROPERTIES

FIELD CENTER:  $15^{\text{h}}02^{\text{m}}12.0^{\text{s}}$   $28^{\circ}36'59''$  (B1950)  
 $15^{\text{h}}04^{\text{m}}19.7^{\text{s}}$   $28^{\circ}25'21''$  (J2000)  
 $l: 43.30$   $b: 60.67$

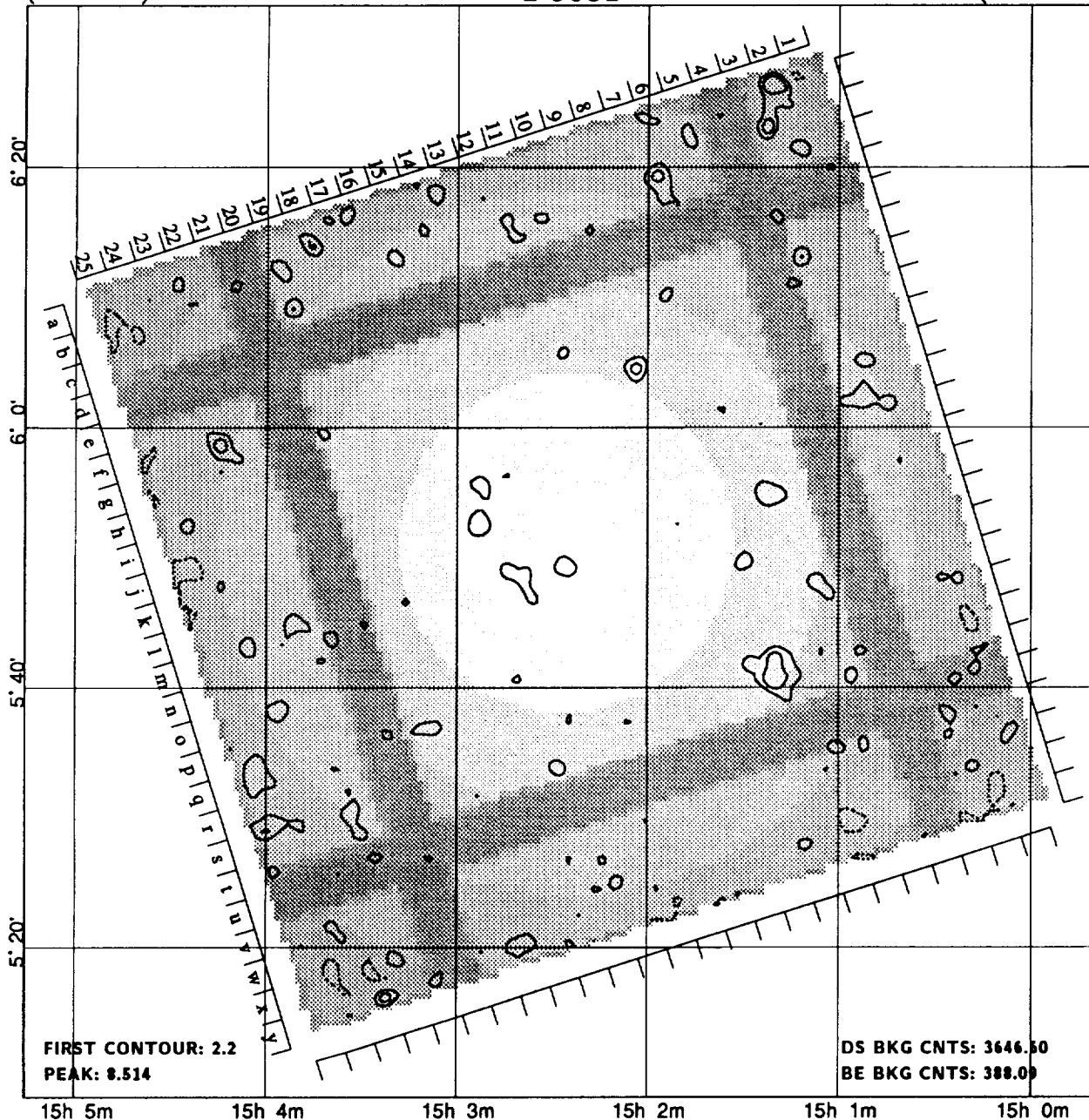
DATE: 1979/225 - 1979/225  
 LIVETIME: 985.1s  
 ROLL ANGLE:  $79.7^{\circ}$

NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 2m)

I 9051

(15h 2m)



FIELD CENTER:  $15^{\text{h}}02^{\text{m}}27.0^{\text{s}}$   $05^{\circ}50'23''$  (B1950)  
 $15^{\text{h}}04^{\text{m}}55.9^{\text{s}}$   $05^{\circ}38'46''$  (J2000)  
 $l: 4.91$   $b: 51.67$

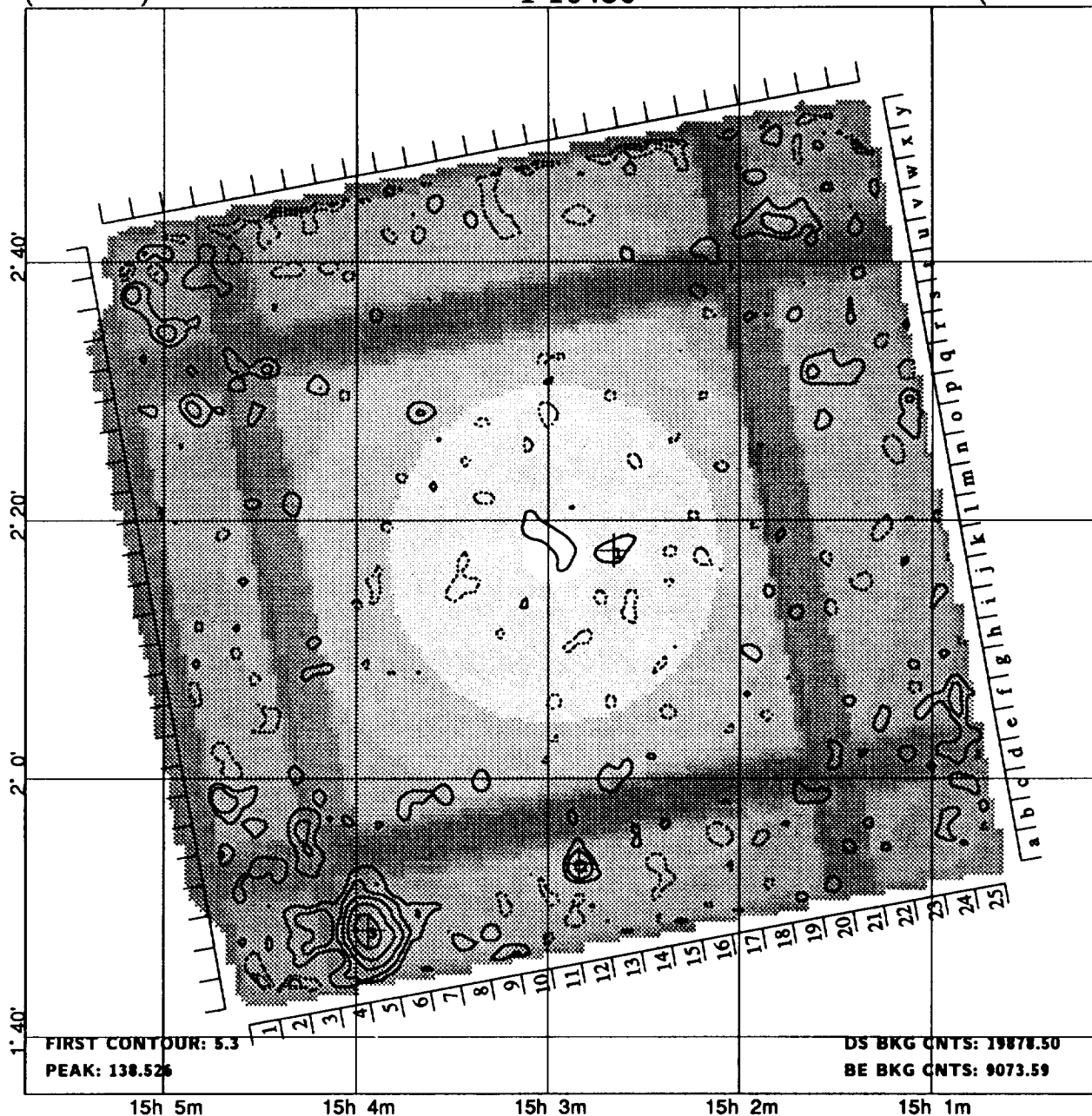
DATE: 1980/217 - 1980/217  
 LIVETIME: 2955.0s  
 ROLL ANGLE:  $72.6^{\circ}$

NH:  $3.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 2m)

I 10456

(15h 2m)



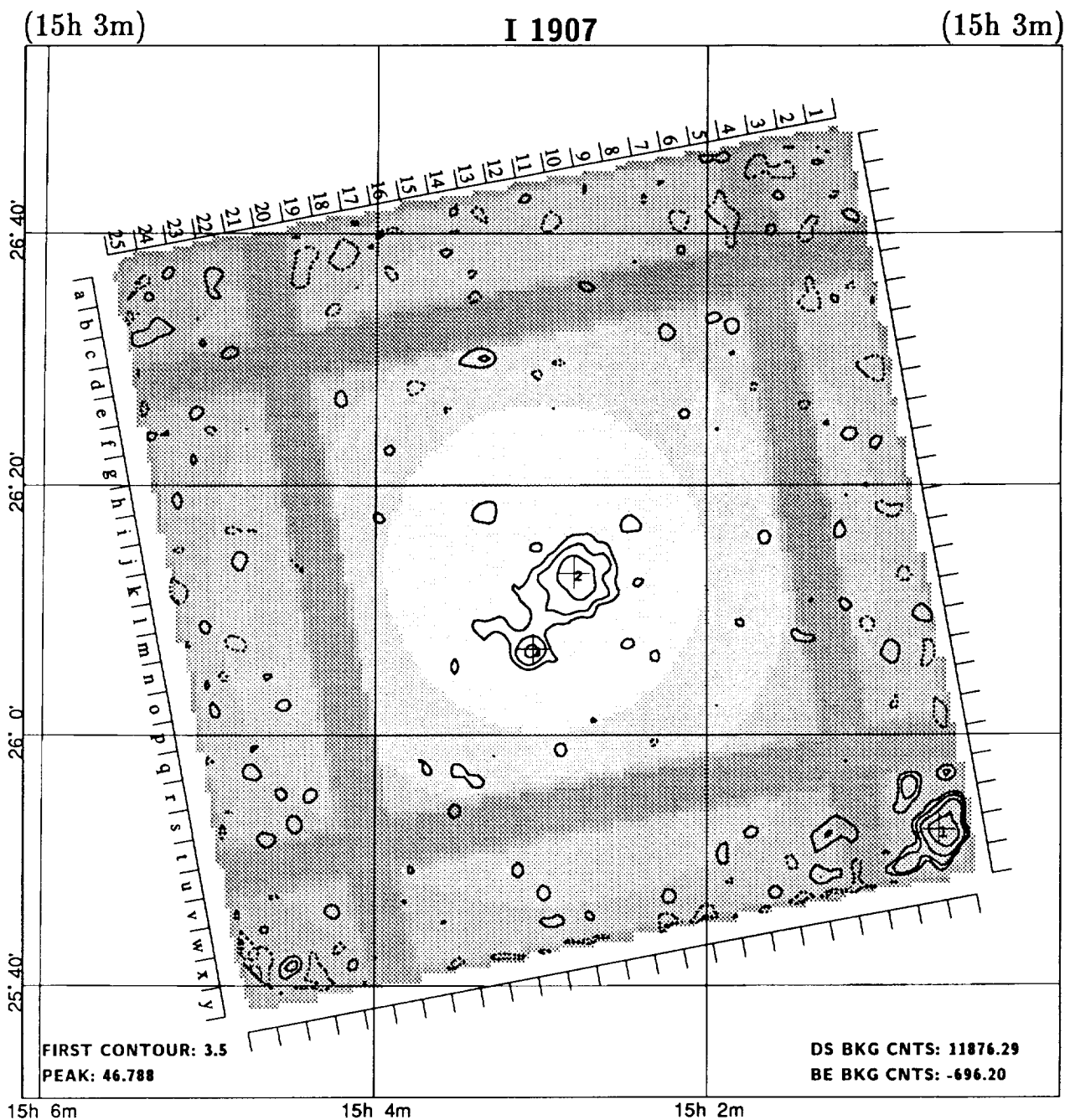
## N5838, ZWICKY CLUSTER W/ RADIO SOURCE

FIELD CENTER:  $15^{\text{h}}02^{\text{m}}55.0^{\text{s}}$   $02^{\circ}17'36''$  (B1950)  
 $15^{\text{h}}05^{\text{m}}26.9^{\text{s}}$   $02^{\circ}06'01''$  (J2000)  
 $l: 0.73$   $b: 49.32$

DATE: 1981/ 52 - 1981/ 53  
 LIVETIME: 16108.1s  
 ROLL ANGLE:  $-100.4^{\circ}$

NH:  $4.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R' "	SRC FLG	ID
3375	1L	15 02 39.5	02 17 40	35	0.0048	0.0012	56.1	68.9	3.9	0.7	0	3.6		
3377	2L	15 02 50.2	01 53 18	51	0.0073	0.0017	52.4	42.6	4.1	0.8	400	24.3		
3380	3L	15 03 56.2	01 48 10	47	*0.0274	0.0068	136.1	133.9	3.9	2.0	906	33.2	A	CLG



X-RAY STUDY OF RADIO GALAXIES: 3C310

FIELD CENTER:  $15^{\text{h}}03^{\text{m}}00.0^{\text{s}}$   $26^{\circ}12'59''$  (B1950)  
 $15^{\text{h}}05^{\text{m}}10.2^{\text{s}}$   $26^{\circ}01'24''$  (J2000)  
 $\ell$ : 38.53  $b$ : 60.17

DATE: 1980/225 - 1980/226  
 LIVETIME: 9623.7s  
 ROLL ANGLE:  $79.5^{\circ}$

NH:  $3.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

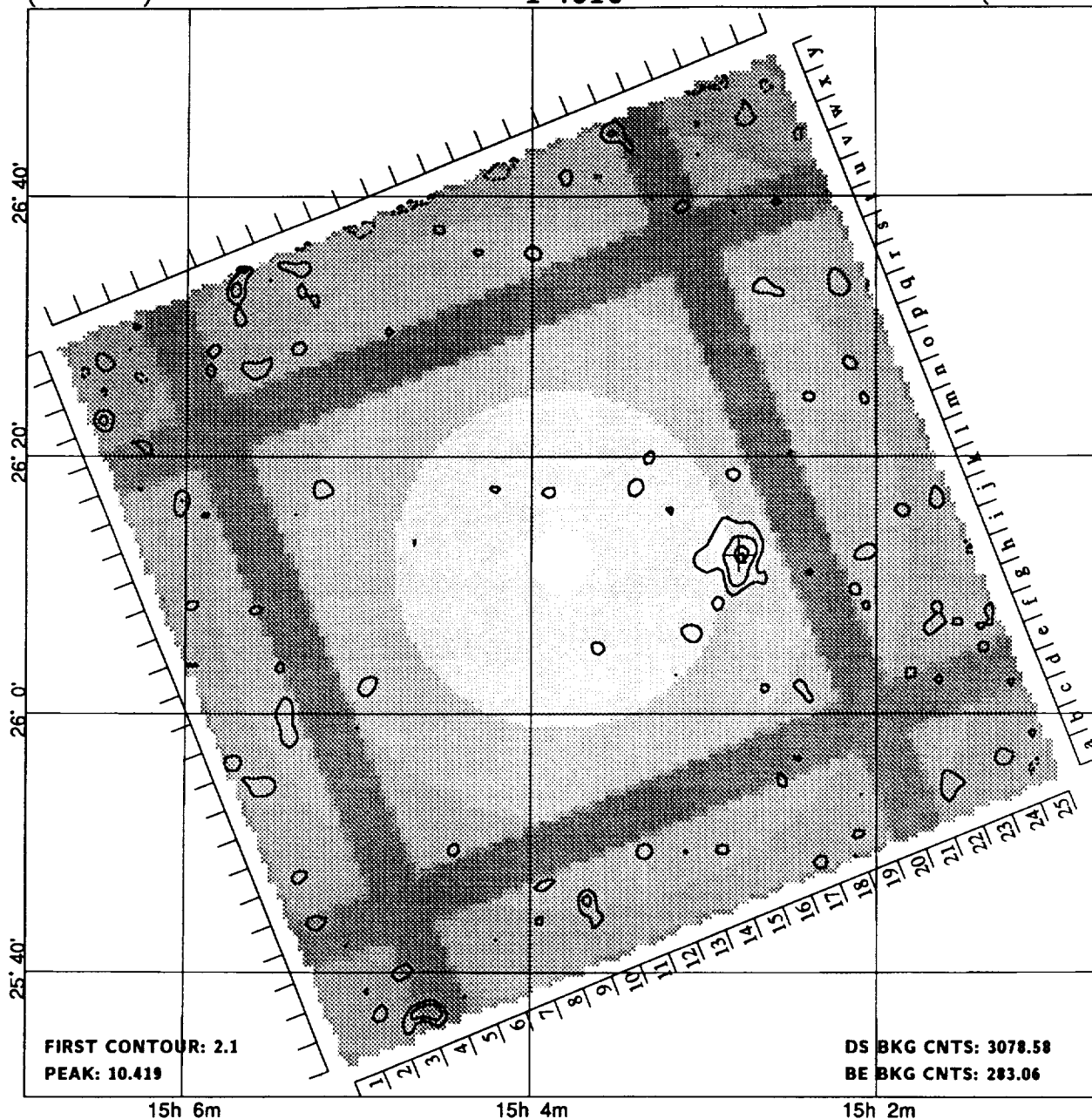
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3371	1	15 00 36.9	25 52 26	50	0.0265	0.0040	56.5	16.5	6.6	1.5	0	38.3	H	
3376	2	15 02 48.0	26 12 57	31	0.0168	0.0017	118.7	26.3	9.9	3.2	0	2.5	AH	G
3378	3	15 03 02.9	26 06 50	41	0.0083	0.0013	56.2	25.8	6.2	6.5	0	6.3	H	



(15h 3m)

I 4616

(15h 3m)



FIELD CENTER:  $15^h 03^m 48.0^s$   $26^\circ 12' 29''$  (B1950)  
 $15^h 05^m 58.1^s$   $26^\circ 00' 56''$  (J2000)  
 $l: 38.57$   $b: 59.99$

DATE: 1980/ 24 - 1980/ 24  
 LIVETIME: 2494.7s  
 ROLL ANGLE:  $-112.0^\circ$

NH:  $3.5E+20$   
 REF/ID: G  
 FIELD FLAGS:

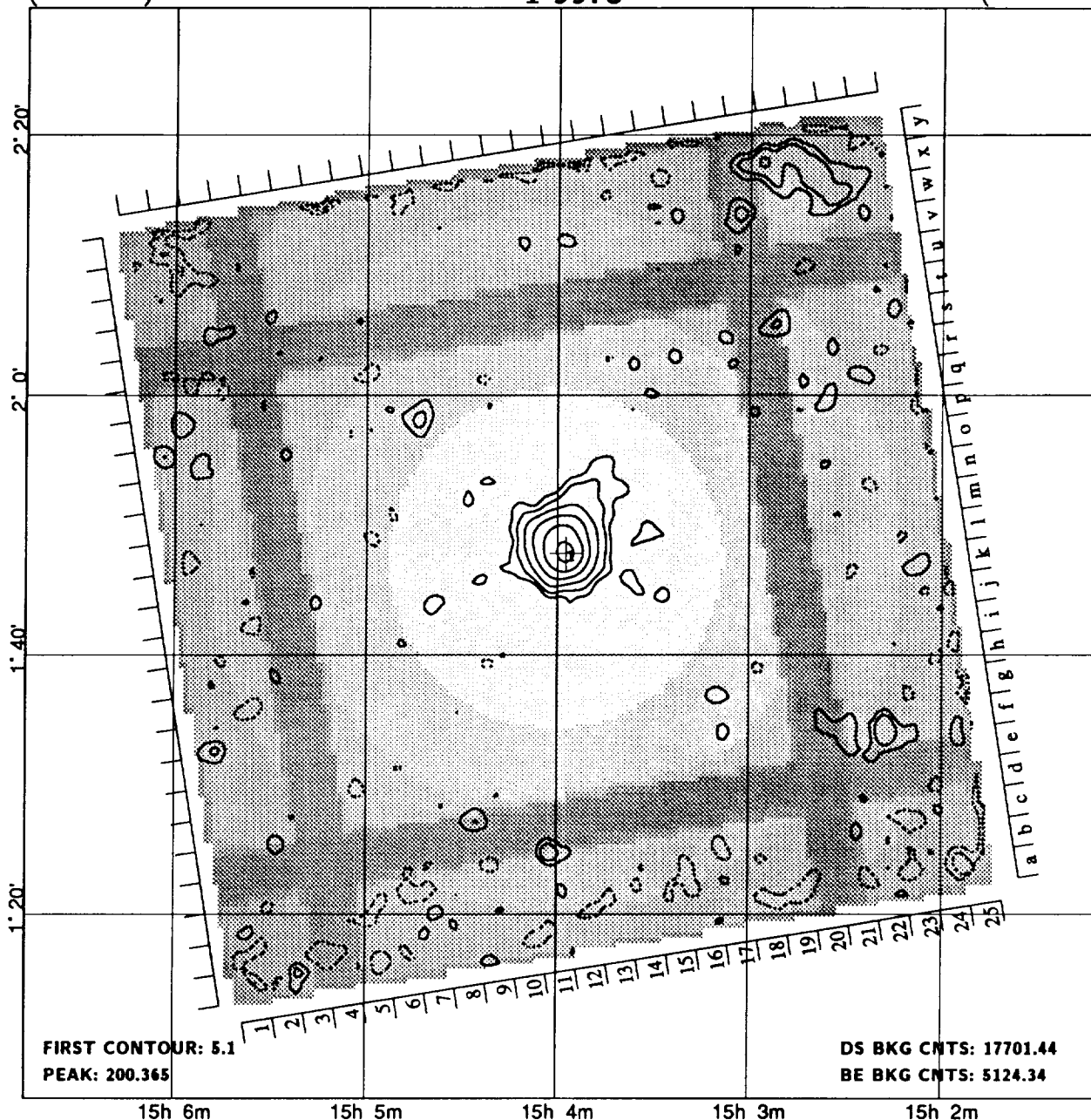
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3376	1	15 02 47.8	26 12 19	42	0.0221	0.0042	33.5	6.5	5.3	1.7	0	13.5	AH	G



(15h 3m)

I 9975

(15h 3m)



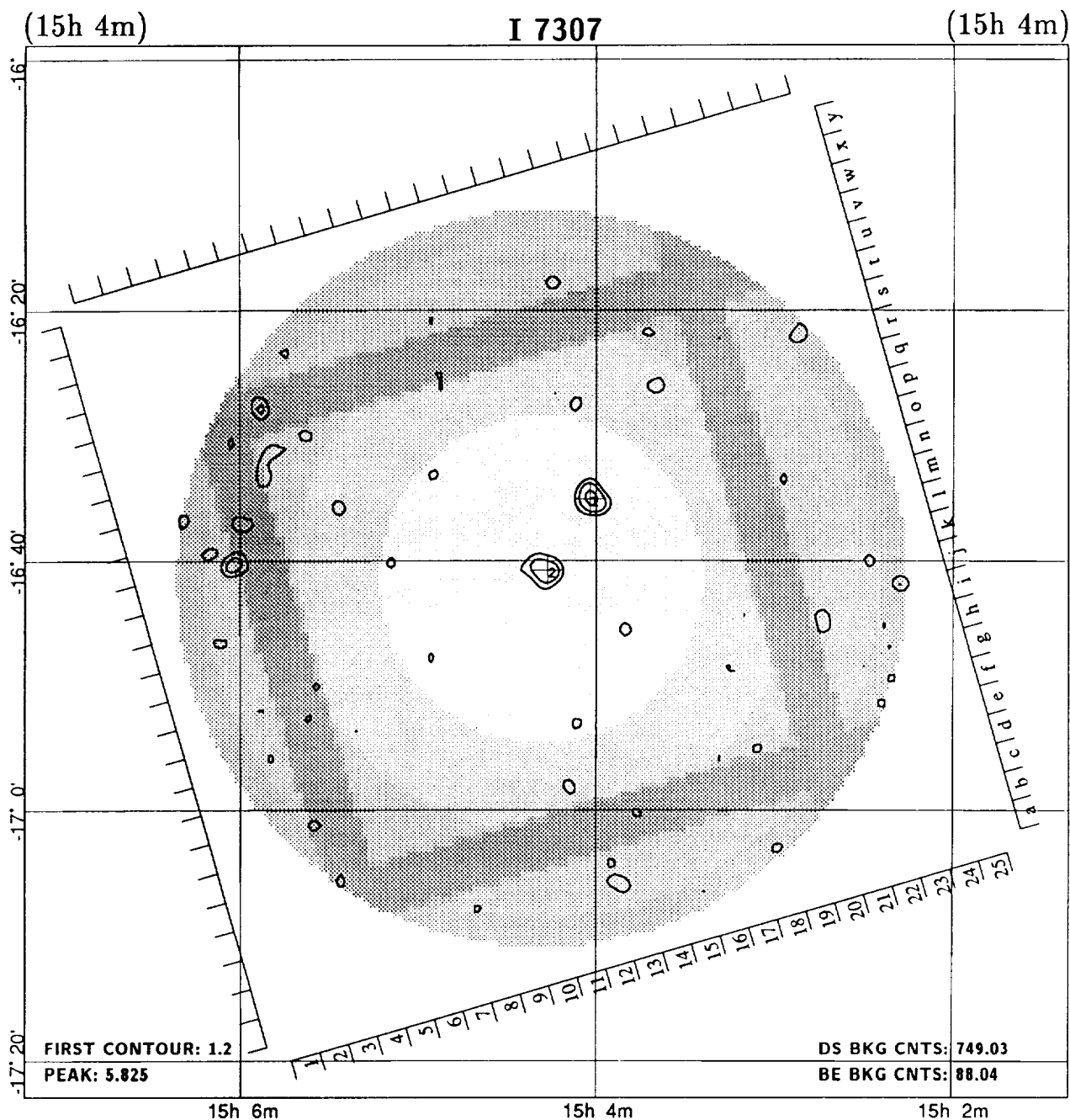
# INTERGALACTIC GAS IN SMALL GROUPS DOMINATED BY EARLY TYPE GALAXIES

FIELD CENTER:  $15^{\text{h}}03^{\text{m}}58.4^{\text{s}}$   $01^{\circ}47'47''$  (B1950)  
 $15^{\text{h}}06^{\text{m}}30.7^{\text{s}}$   $01^{\circ}36'15''$  (J2000)  
 $l: 0.43$   $b: 48.79$

DATE: 1981/ 26 - 1981/ 26  
 LIVETIME: 14344.0s  
 ROLL ANGLE: -99.0°

NH: 4.2E+20  
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3380	1L	15 03 57.3	01 47 49	31	0.0549	0.0035	586.1	375.9	15.6	2.1	0	0.2	A	CLG

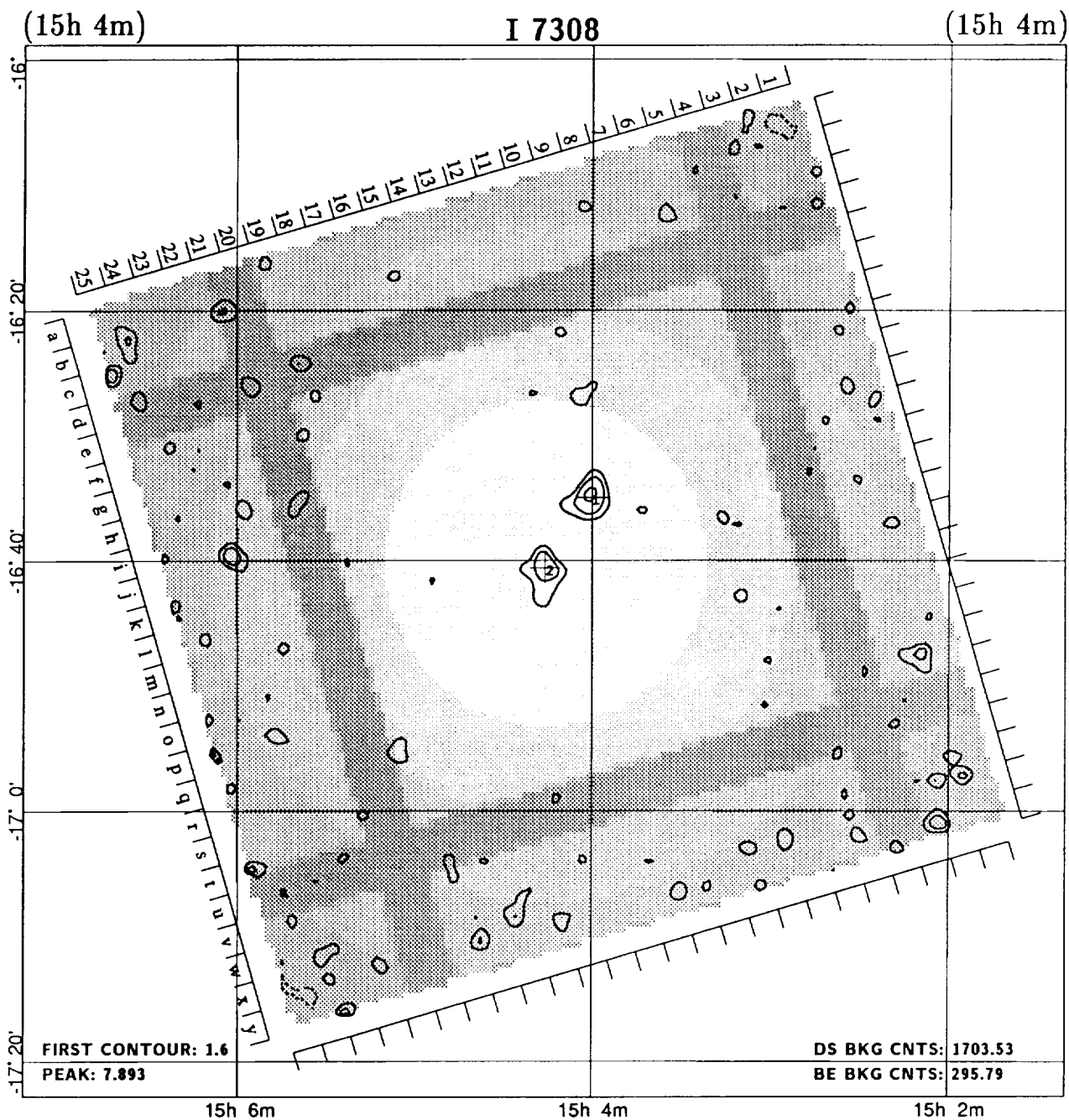


FIELD CENTER:  $15^h 04^m 16.5^s$   $-16^\circ 40' 56''$  (B1950)  
 $15^h 07^m 04.8^s$   $-16^\circ 52' 27''$  (J2000)  
 $l: 343.64$   $b: 35.06$

DATE: 1980/ 41 - 1980/ 42  
 LIVETIME: 607.0s  
 ROLL ANGLE:  $-106.0^\circ$

NH:  $7.5E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3381	1	15 04 02.0	-16 35 05	42	0.048	0.011	20.1	1.9	4.3	0.8	0	6.9	AH	
3382	2	15 04 16.4	-16 40 45	37	0.042	0.010	18.8	2.2	4.1	0.8	0	0.4	AH	Q



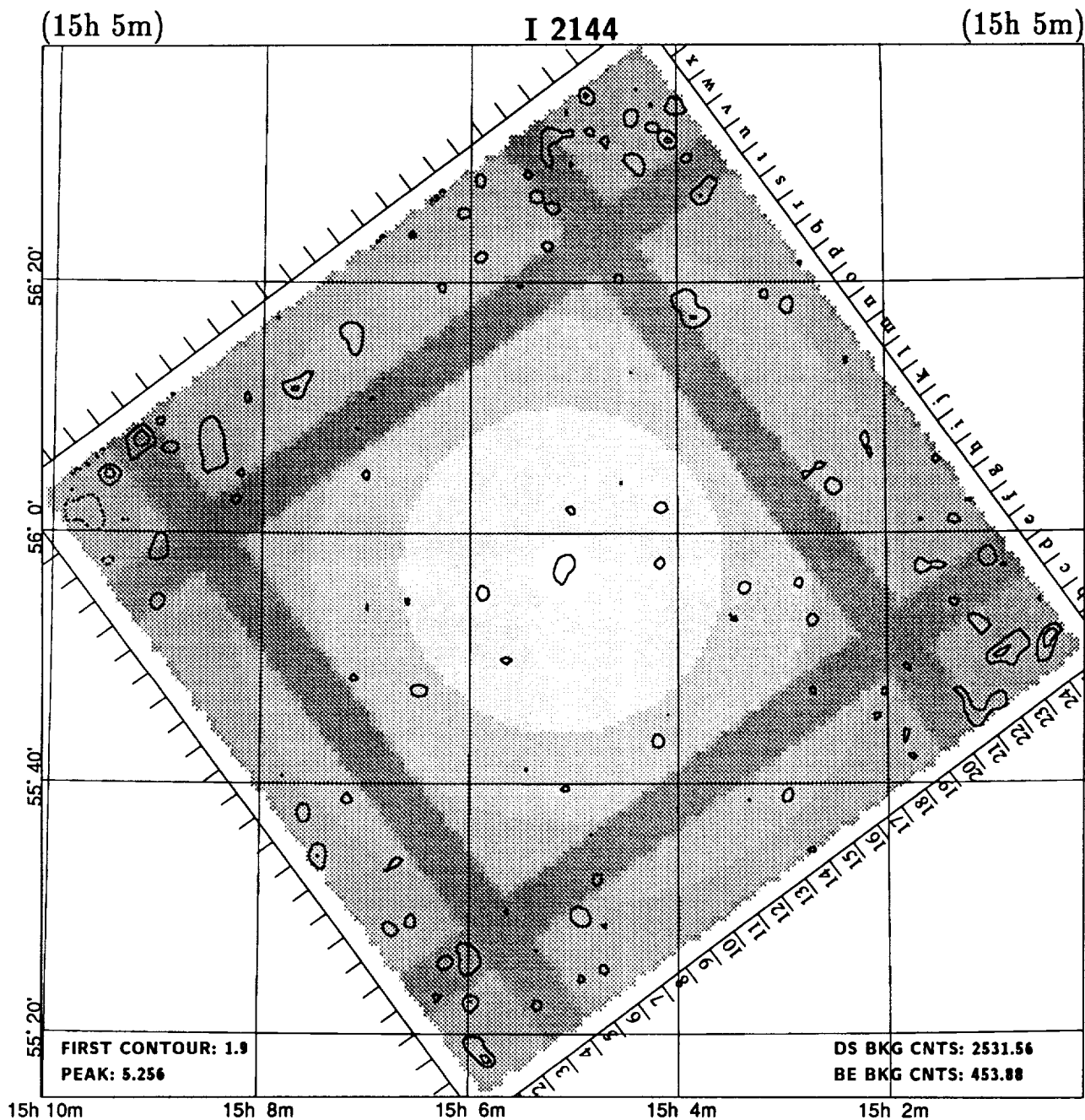
OR-102, LOW FREQ. VAR. EXTRAGAL. RADIO SOURCE

FIELD CENTER:  $15^{\text{h}}04^{\text{m}}16.5^{\text{s}}$   $-16^{\circ}40'56''$  (B1950)  
 $15^{\text{h}}07^{\text{m}}04.8^{\text{s}}$   $-16^{\circ}52'27''$  (J2000)  
 $l: 343.64$   $b: 35.06$

DATE: 1980/211 - 1980/211  
 LIVETIME: 1380.4s  
 ROLL ANGLE:  $73.8^{\circ}$

NH:  $7.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3381	1	15 04 00.1	-16 34 58	42	0.0309	0.0061	29.9	5.1	5.1	1.1	0	7.1	AH	
3382	2	15 04 15.9	-16 40 34	36	0.0244	0.0053	25.1	4.9	4.6	1.2	0	0.4	AH	Q



**X-RAY SURVEY OF NORMAL GALAXIES: NGC5866**

**FIELD CENTER:**  $15^h 05^m 06.0^s$   $55^\circ 56' 59''$  (B1950)  
 $15^h 06^m 28.3^s$   $55^\circ 45' 29''$  (J2000)  
 $l: 92.03$   $b: 52.49$

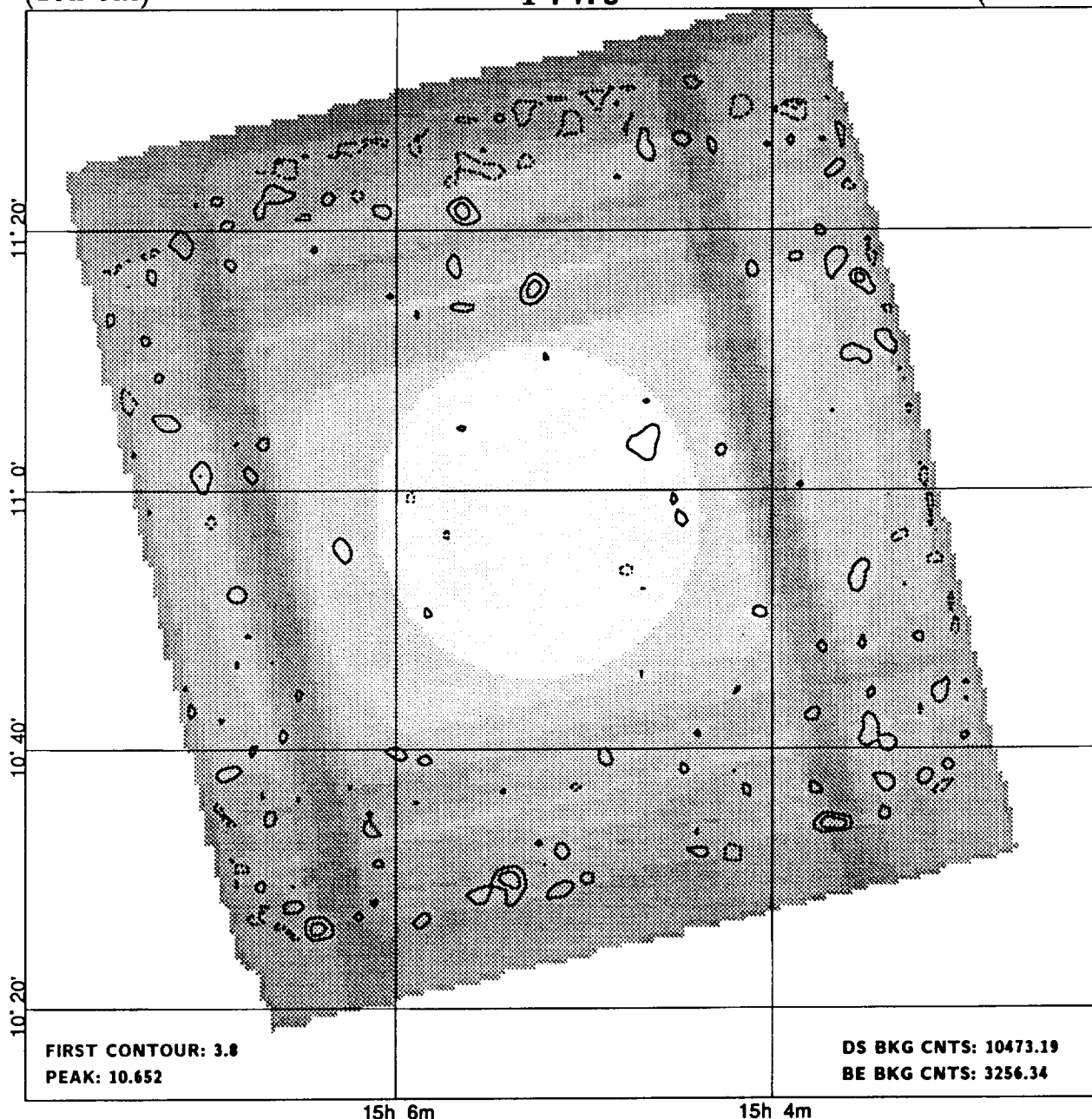
**DATE:** 1979/ 6 - 1979/ 6  
**LIVETIME:** 2051.4s  
**ROLL ANGLE:** -126.6°

**NH:**  $1.5E+20$   
**REF/ID:** I  
**FIELD FLAGS:**

(15h 5m)

I 7478

(15h 5m)



OR 109, EMISSION FROM HIGHLY POLARIZED BL LAC OBJECTS

FIELD CENTER:  $15^{\text{h}}05^{\text{m}}07.0^{\text{s}}$   $10^{\circ}54'59''$  (B1950)  
 $15^{\text{h}}07^{\text{m}}31.5^{\text{s}}$   $10^{\circ}43'31''$  (J2000)  
 $l: 12.42$   $b: 54.06$

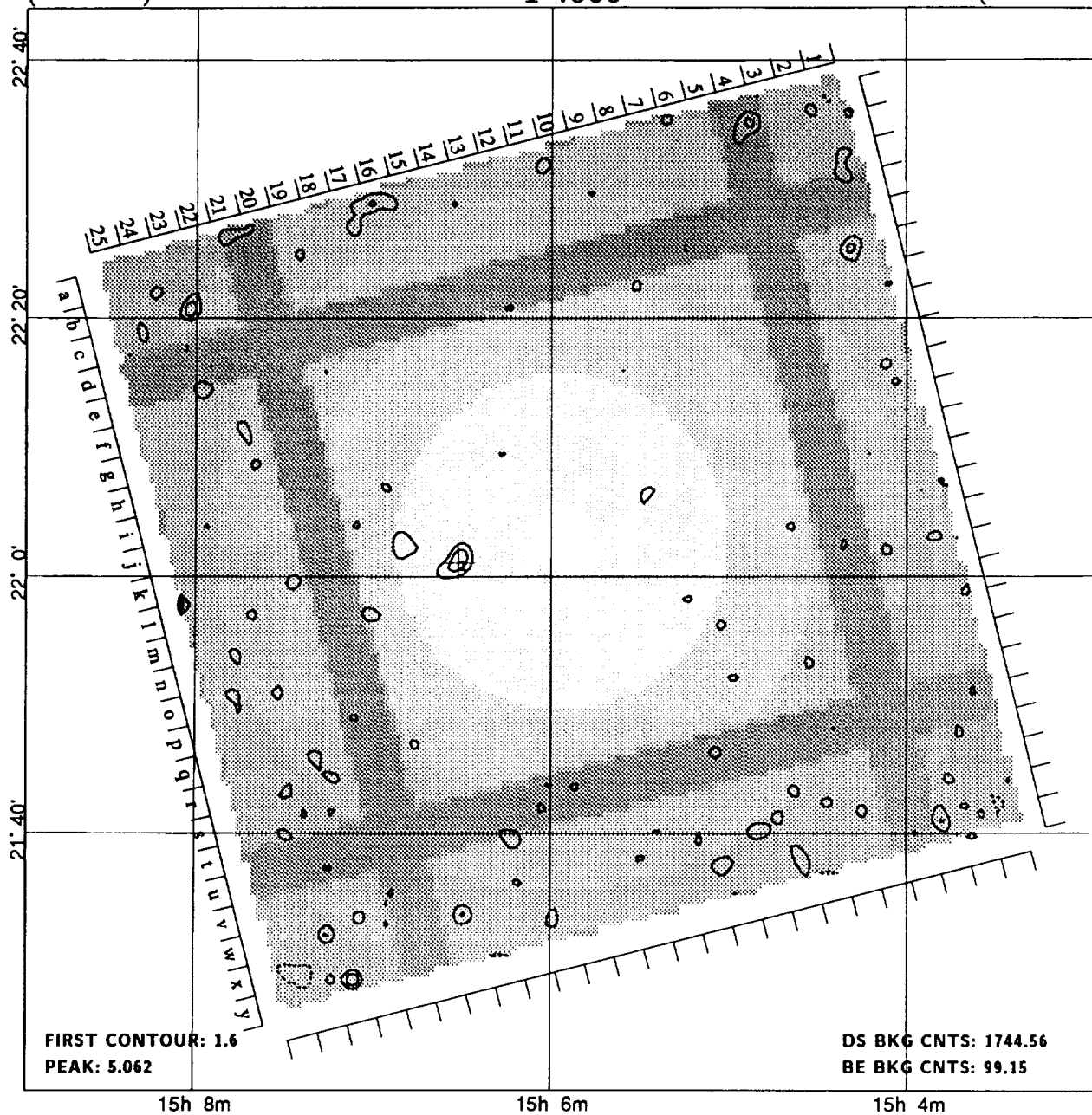
DATE: 1980/ 41 - 1980/ 42  
 LIVETIME: 8486.8s

NH:  $2.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(15h 5m)

I 4060

(15h 5m)



## LB 9440, RADIO QUIET QUASAR WITH CONTINUOUS SPECTRUM

FIELD CENTER: 15<sup>h</sup>05<sup>m</sup>55.6<sup>s</sup> 22°02'04" (B1950)15<sup>h</sup>08<sup>m</sup>09.7<sup>s</sup> 21°50'38" (J2000) $l$ : 30.85  $b$ : 58.55

DATE: 1979/226 - 1979/226

LIVETIME: 1413.7s

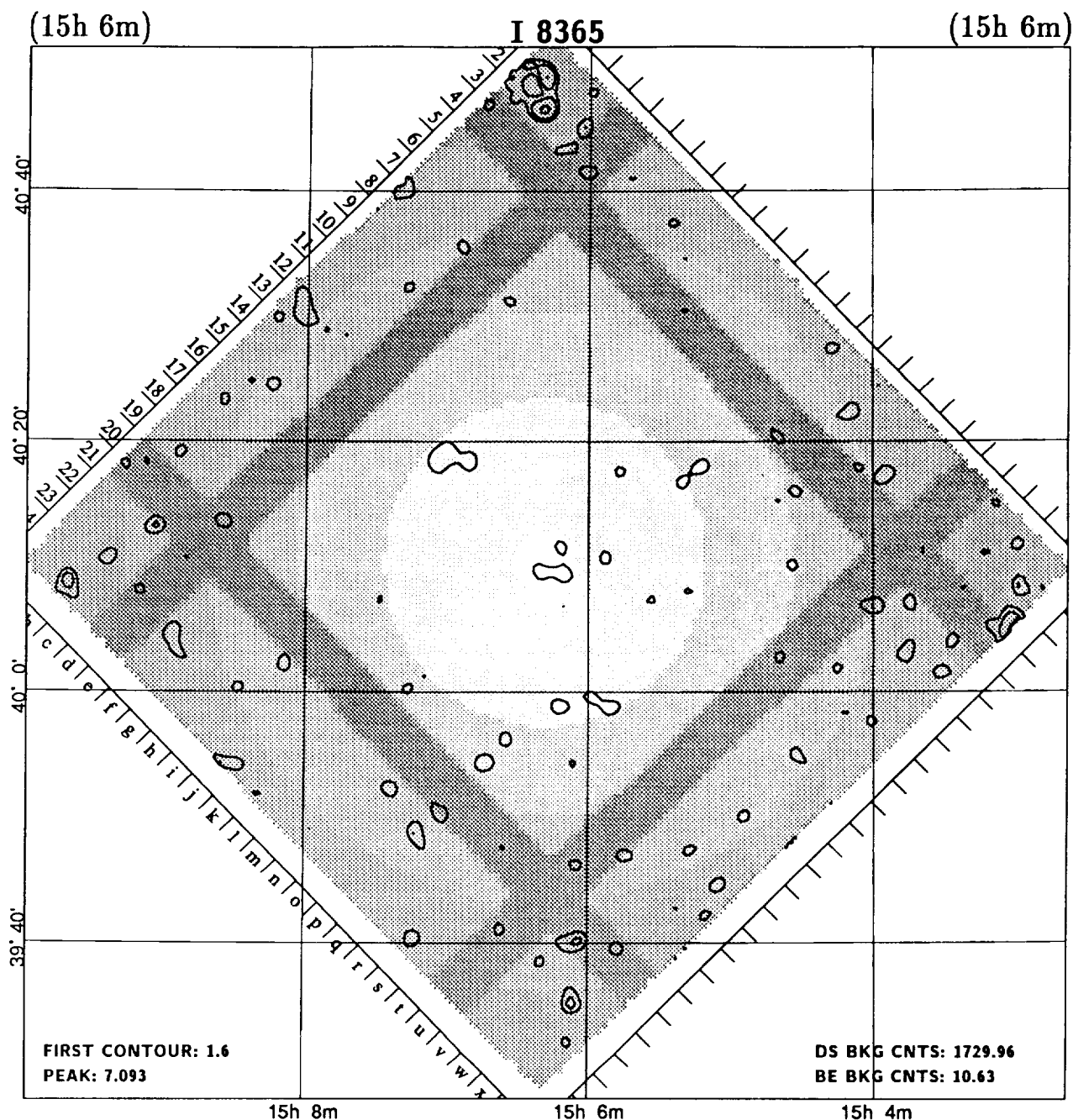
ROLL ANGLE: 75.8°

NH: 3.6E+20

REF/ID:

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3383	1	15 06 31.4	22 01 04	46	0.0173	0.0047	16.8	4.2	3.7	0.8	0	8.2	H	



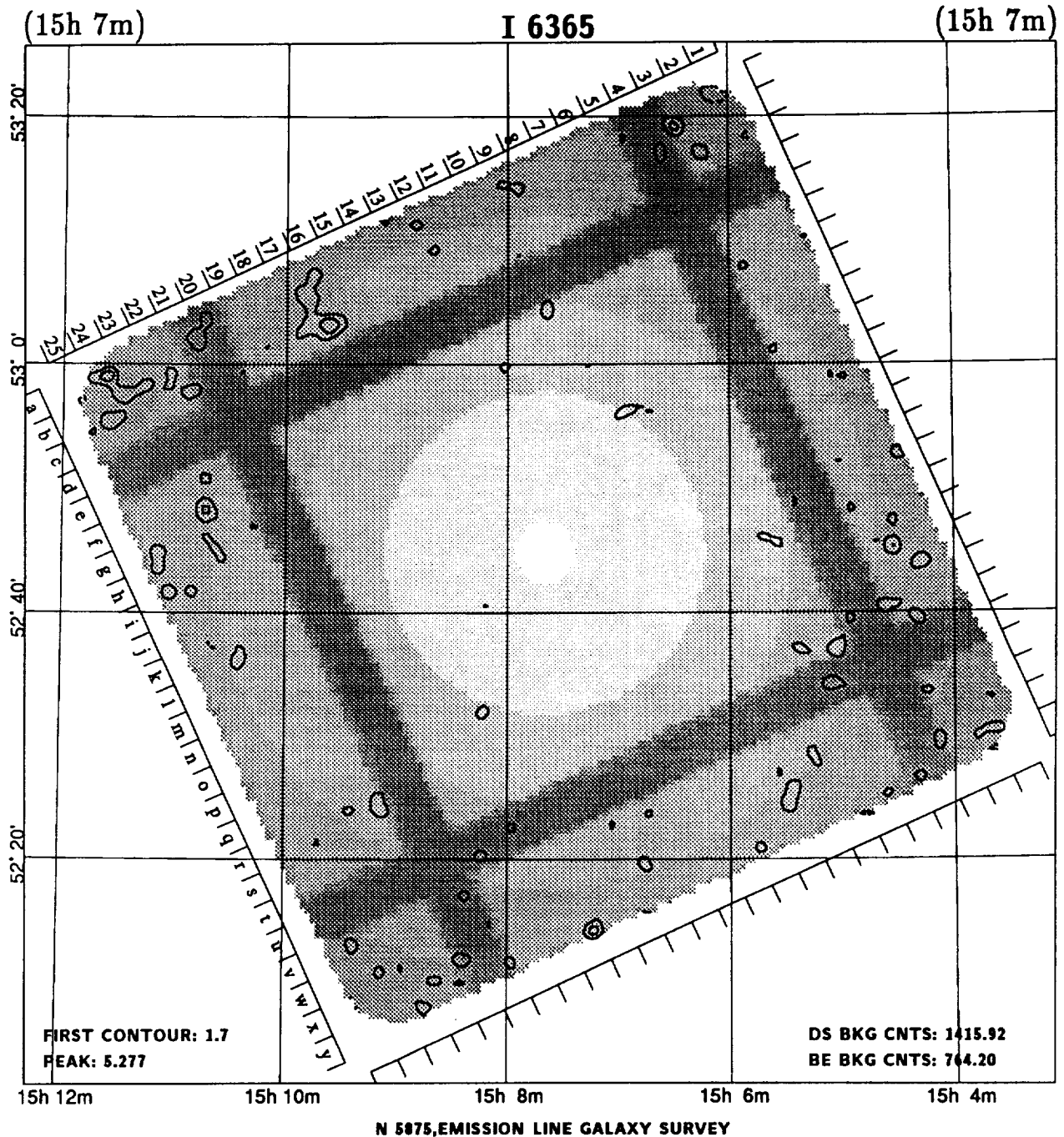
**TZ BOO, STAR SPOT ACTIVITY IN ECLIPSING BINARIES**

FIELD CENTER: 15<sup>h</sup>06<sup>m</sup>18.0<sup>s</sup> 40°09'29" (B1950)  
15<sup>h</sup>08<sup>m</sup>10.8<sup>s</sup> 39°58'04" (J2000)  
 $\ell$ : 66.21  $b$ : 59.00

DATE: 1980/179 - 1980/179  
LIVETIME: 1401.8s  
ROLL ANGLE: 45.5°

NH: 1.4E+20  
REF/ID:  
FIELD FLAGS:

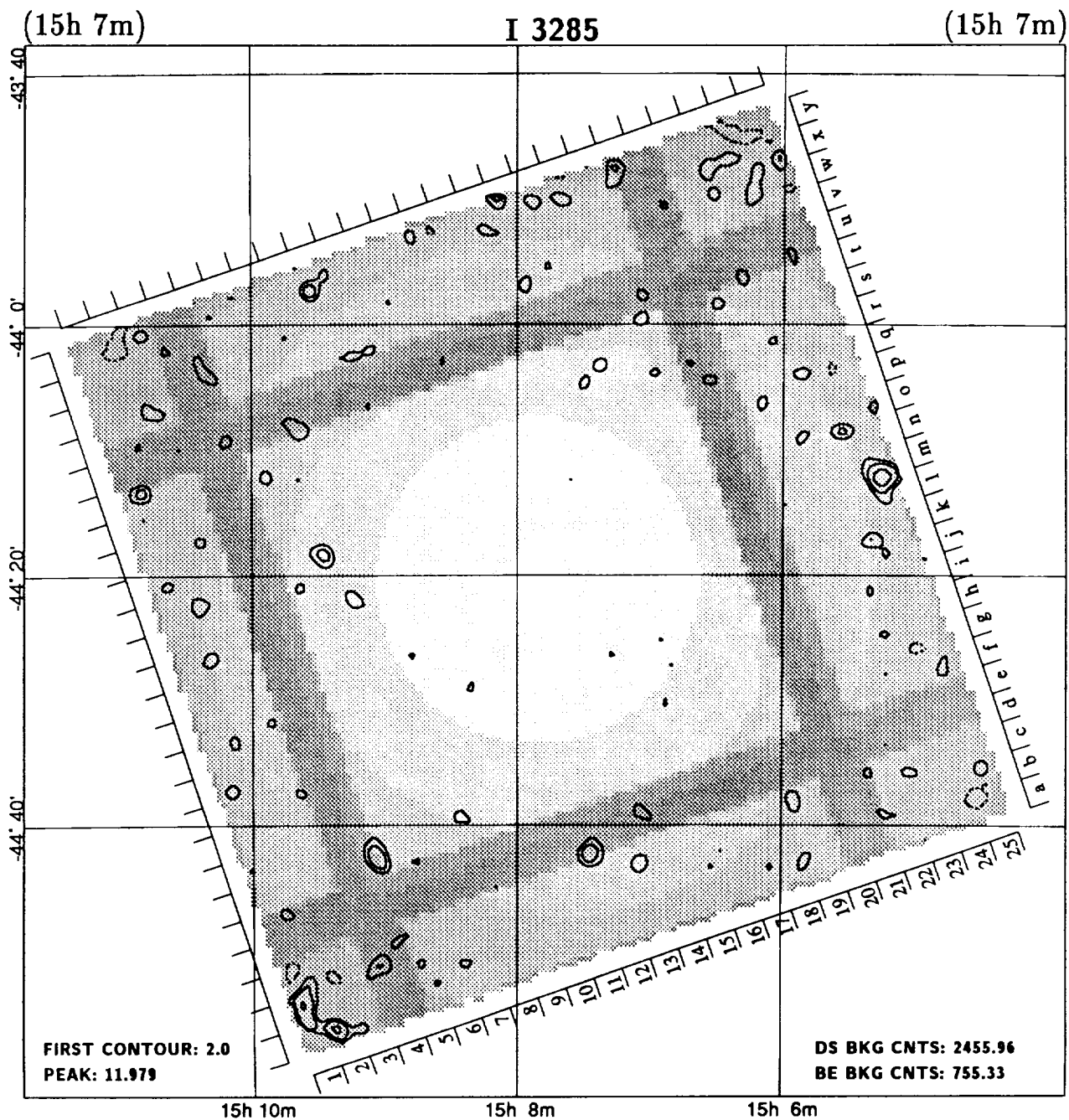




**FIELD CENTER:** 15<sup>h</sup>07<sup>m</sup>42.0<sup>s</sup> 52°43'59" (B1950)  
 15<sup>h</sup>09<sup>m</sup>11.6<sup>s</sup> 52°32'37" (J2000)  
 $l$ : 87.18  $b$ : 53.94

**DATE:** 1980/203 - 1980/203  
**LIVETIME:** 1147.4s  
**ROLL ANGLE:** 65.4°

**NH:** 1.6E+20  
**REF/ID:**  
**FIELD FLAGS:**

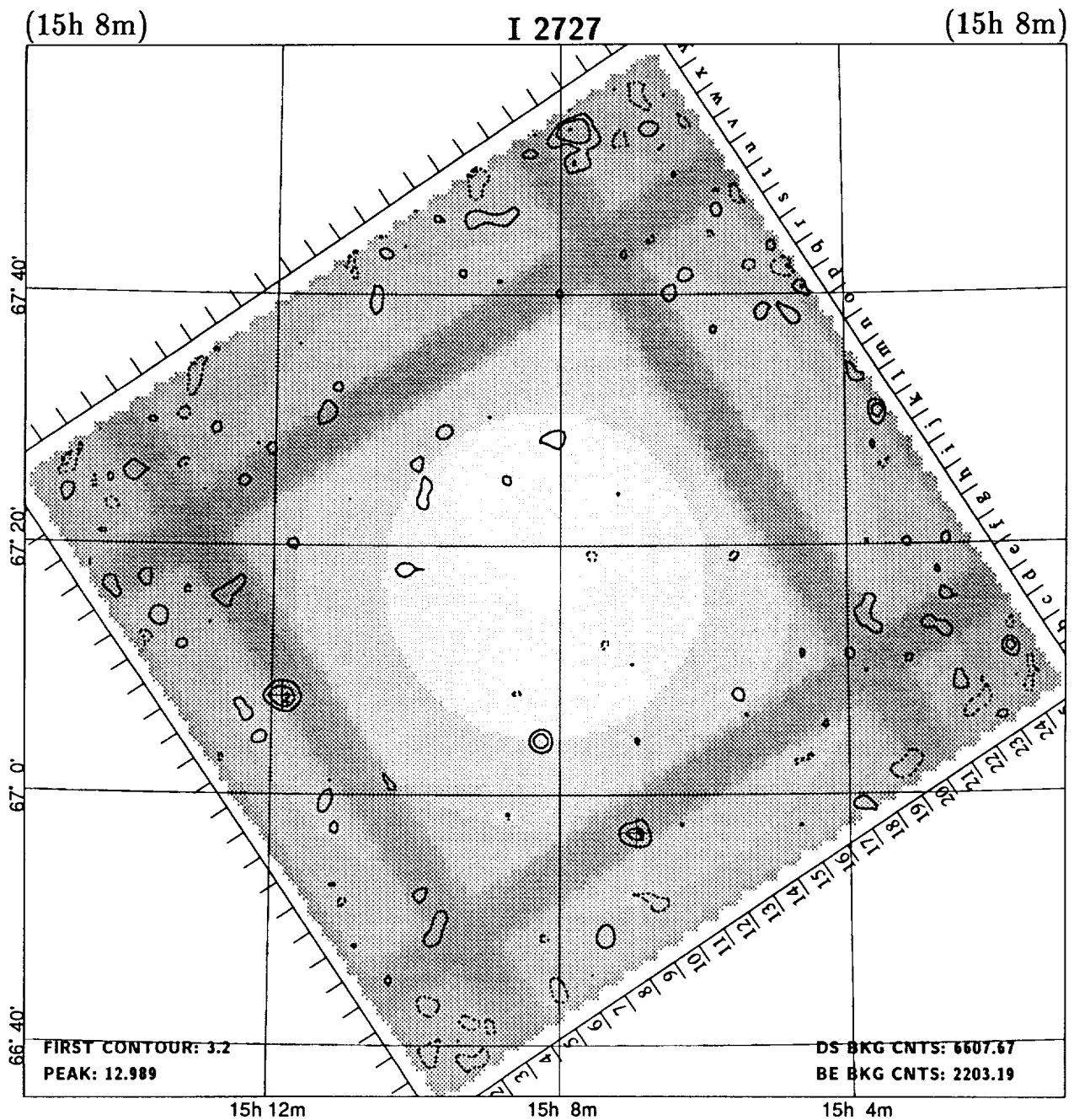


CANDIDATE X-RAY BINARY SOURCES: HD 134687

FIELD CENTER:  $15^{\text{h}}07^{\text{m}}48.0^{\text{s}}$   $-44^{\circ}19'47''$  (B1950)  
 $15^{\text{h}}11^{\text{m}}09.9^{\text{s}}$   $-44^{\circ}31'06''$  (J2000)  
 $l$ : 327.56  $b$ : 11.57

DATE: 1980/ 50 - 1980/ 50  
LIVETIME: 1990.1s  
ROLL ANGLE:  $-108.8^{\circ}$

NH:  $1.4\text{E}+21$   
REF/ID:  
FIELD FLAGS: L



LOCAL GROUP GALAXIES: U MI

FIELD CENTER:  $15^{\text{h}}08^{\text{m}}12.0^{\text{s}}$   $67^{\circ}17'59''$  (B1950)  
 $15^{\text{h}}08^{\text{m}}49.2^{\text{s}}$   $67^{\circ}06'37''$  (J2000)  
 $l: 104.88$   $b: 44.90$

DATE: 1979/ 8 - 1979/ 8  
 LIVETIME: 5546.7s  
 ROLL ANGLE:  $-123.8^{\circ}$

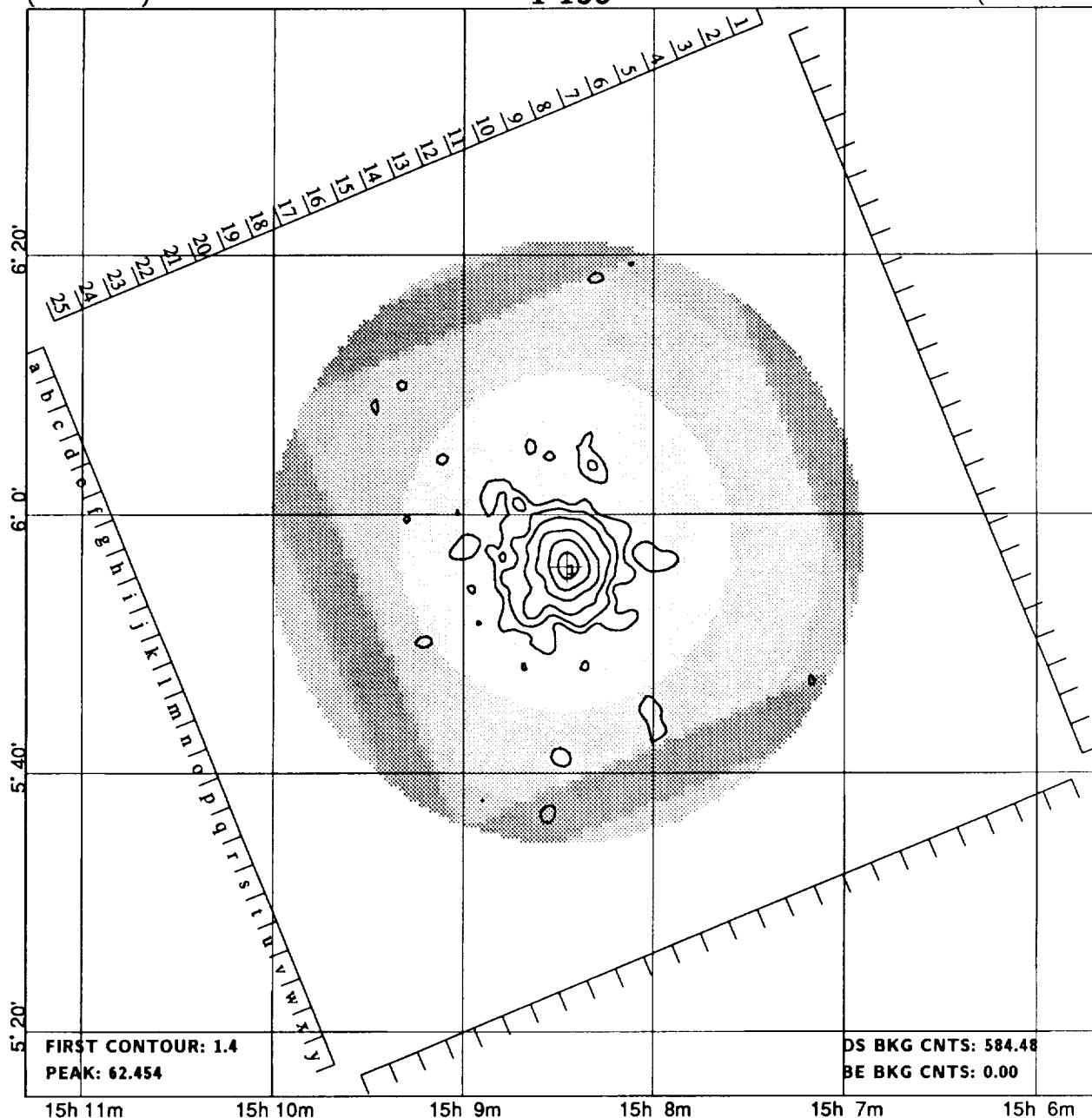
NH:  $2.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3384	1	15 06 56.8	66 56 59	59	*0.0074	0.0020	19.9	10.1	3.6	0.6	1309	22.2		
3396	2	15 11 51.4	67 07 55	55	*0.0093	0.0024	23.7	12.3	4.0	0.8	1008	23.6		

(15h 8m)

I 138

(15h 8m)



## A2029 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $15^{\text{h}}08^{\text{m}}28.8^{\text{s}}$   $05^{\circ}56'59''$  (B1950)  
 $15^{\text{h}}10^{\text{m}}57.5^{\text{s}}$   $05^{\circ}45'42''$  (J2000)  
 $l: 6.50$   $b: 50.55$

DATE: 1979/203 - 1979/203

NH:  $3.1\text{E}+20$ 

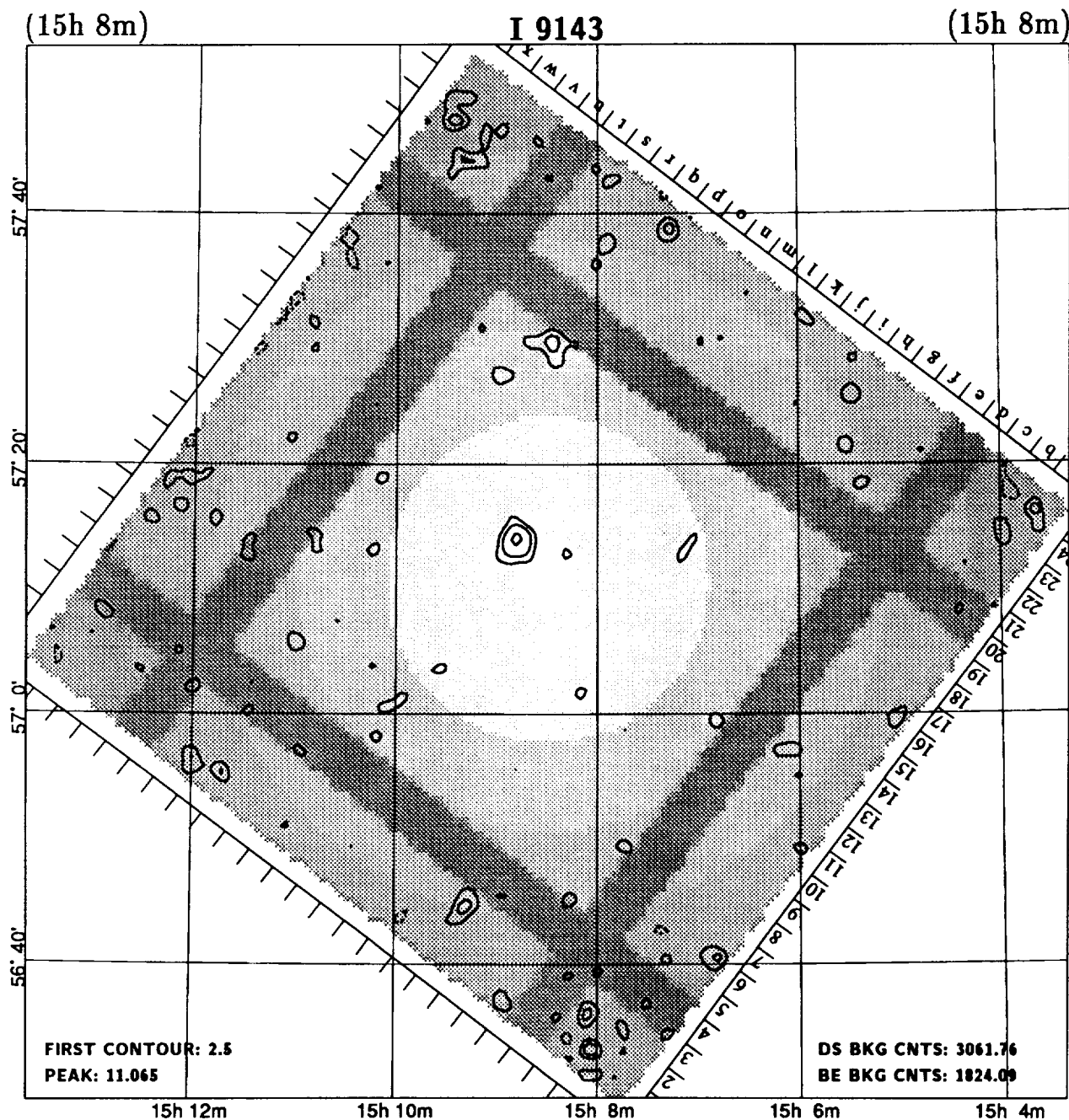
LIVETIME: 473.6s

REF/ID:

ROLL ANGLE:  $67.6^{\circ}$ 

FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3385	1L	15 08 27.2	05 55 56	31	0.523	0.058	183.0	100.0	9.0	2.5	0	1.3		CLG



CAREFULLY SELECTED Sbc GALAXIES: NGC 5079

FIELD CENTER:  $15^{\text{h}}08^{\text{m}}29.4^{\text{s}}$   $57^{\circ}11'23''$  (B1950)  
 $15^{\text{h}}09^{\text{m}}47.3^{\text{s}}$   $57^{\circ}00'04''$  (J2000)  
 $l$ : 93.23  $b$ : 51.40

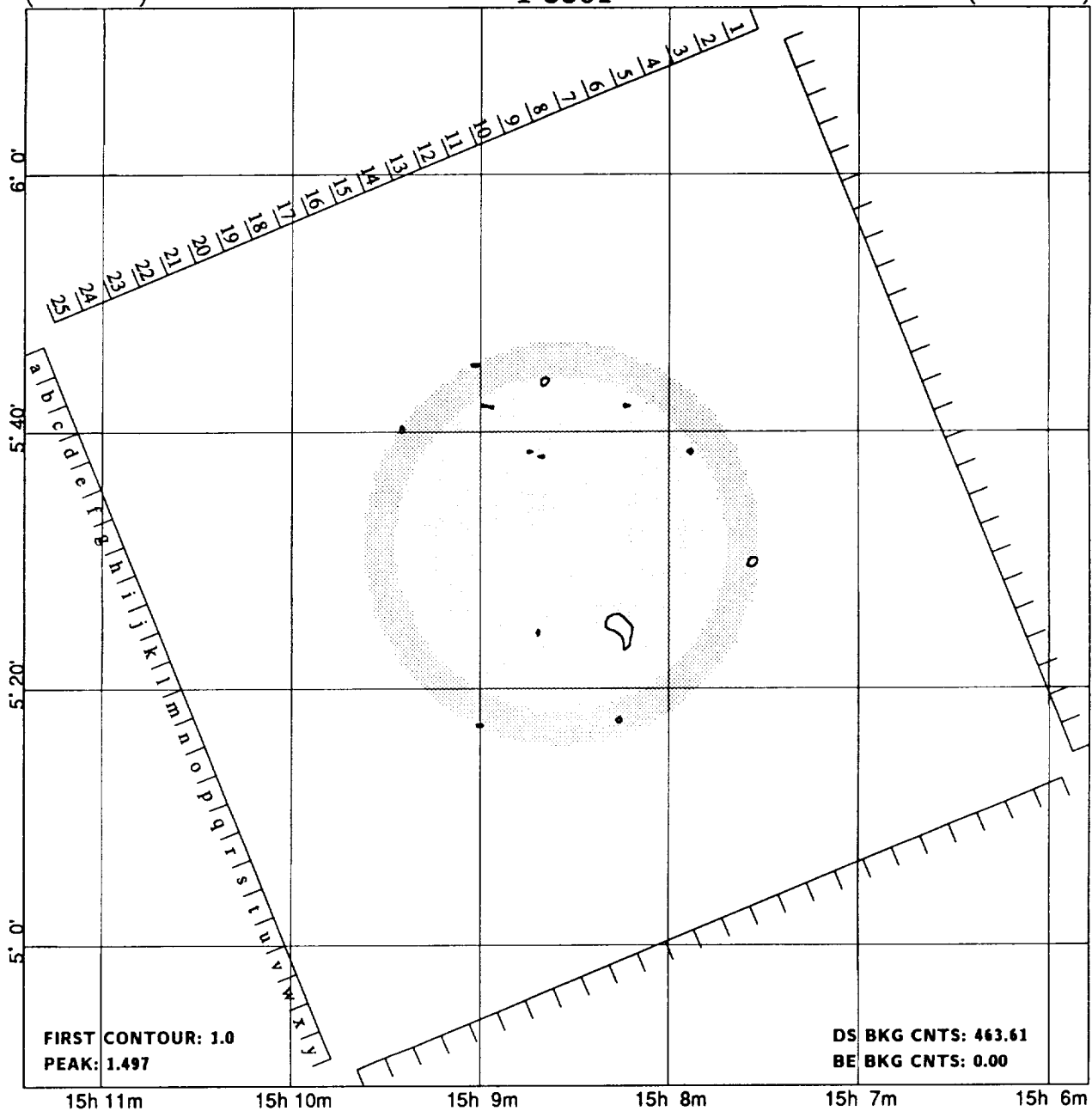
DATE: 1980/357 - 1980/357  
 LIVETIME: 2481.0s  
 ROLL ANGLE:  $-143.1^{\circ}$

NH:  $1.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: LS

(15h 8m)

I 3301

(15h 8m)



CD GALAXIES IN POOR CLUSTERS: K160

FIELD CENTER:  $15^{\text{h}}08^{\text{m}}36.0^{\text{s}}$   $05^{\circ}30'59''$  (B1950)  
 $15^{\text{h}}11^{\text{m}}05.1^{\text{s}}$   $05^{\circ}19'42''$  (J2000)  
 $l: 5.99$   $b: 50.27$

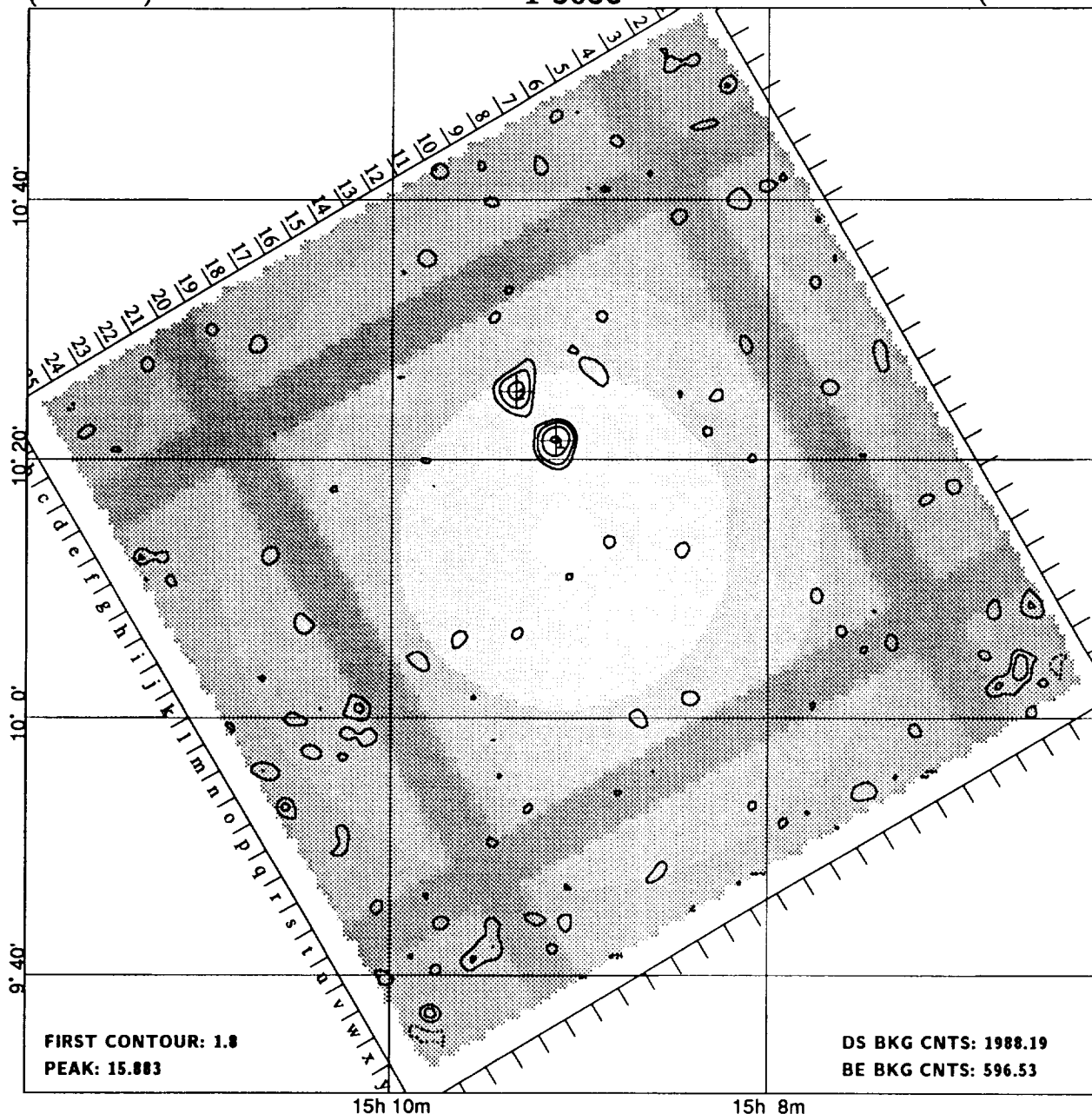
DATE: 1979/203 - 1979/203  
 LIVETIME: 375.7s  
 ROLL ANGLE:  $67.7^{\circ}$

NH:  $3.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(15h 9m)

I 3038

(15h 9m)



## 4C10.40: HIGH REDSHIFT CLUSTERS OF GALAXIES

FIELD CENTER:  $15^{\text{h}}09^{\text{m}}05.0^{\text{s}}$   $10^{\circ}12'57''$  (B1950) $15^{\text{h}}11^{\text{m}}29.9^{\text{s}}$   $10^{\circ}01'41''$  (J2000) $l: 12.30$   $b: 52.86$ 

DATE: 1979/202 - 1979/202

LIVETIME: 1611.1s

ROLL ANGLE:  $59.5^{\circ}$ NH:  $2.6\text{E}+20$ 

REF/ID:

FIELD FLAGS: L

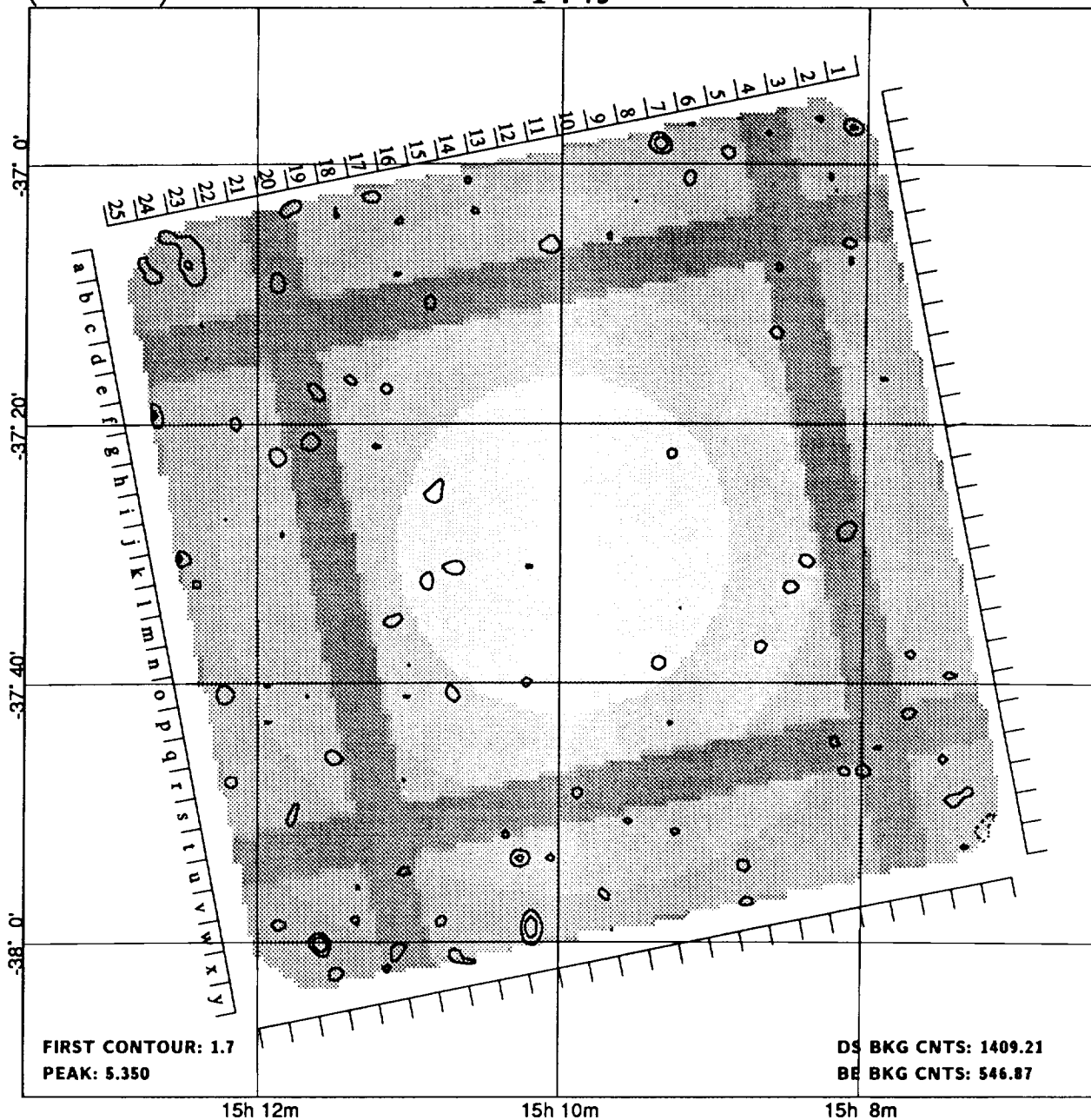
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3386	1L	15 09 07.8	10 21 28	41	0.0568	0.0084	63.0	6.0	6.6	1.0	0	8.5		
3387	2L	15 09 20.4	10 25 17	41	0.0281	0.0070	28.9	9.1	3.9	1.1	0	13.2		



(15h 10m)

I 749

(15h 10m)



15h 12m

15h 10m

15h 8m

## LUPUS LOOP SNR X-RAY STUDY

FIELD CENTER:  $15^h 10^m 00.0^s$   $-37^\circ 29' 59''$  (B1950)  
 $15^h 13^m 11.9^s$   $-37^\circ 41' 11''$  (J2000)  
 $l$ : 331.63  $b$ : 17.16

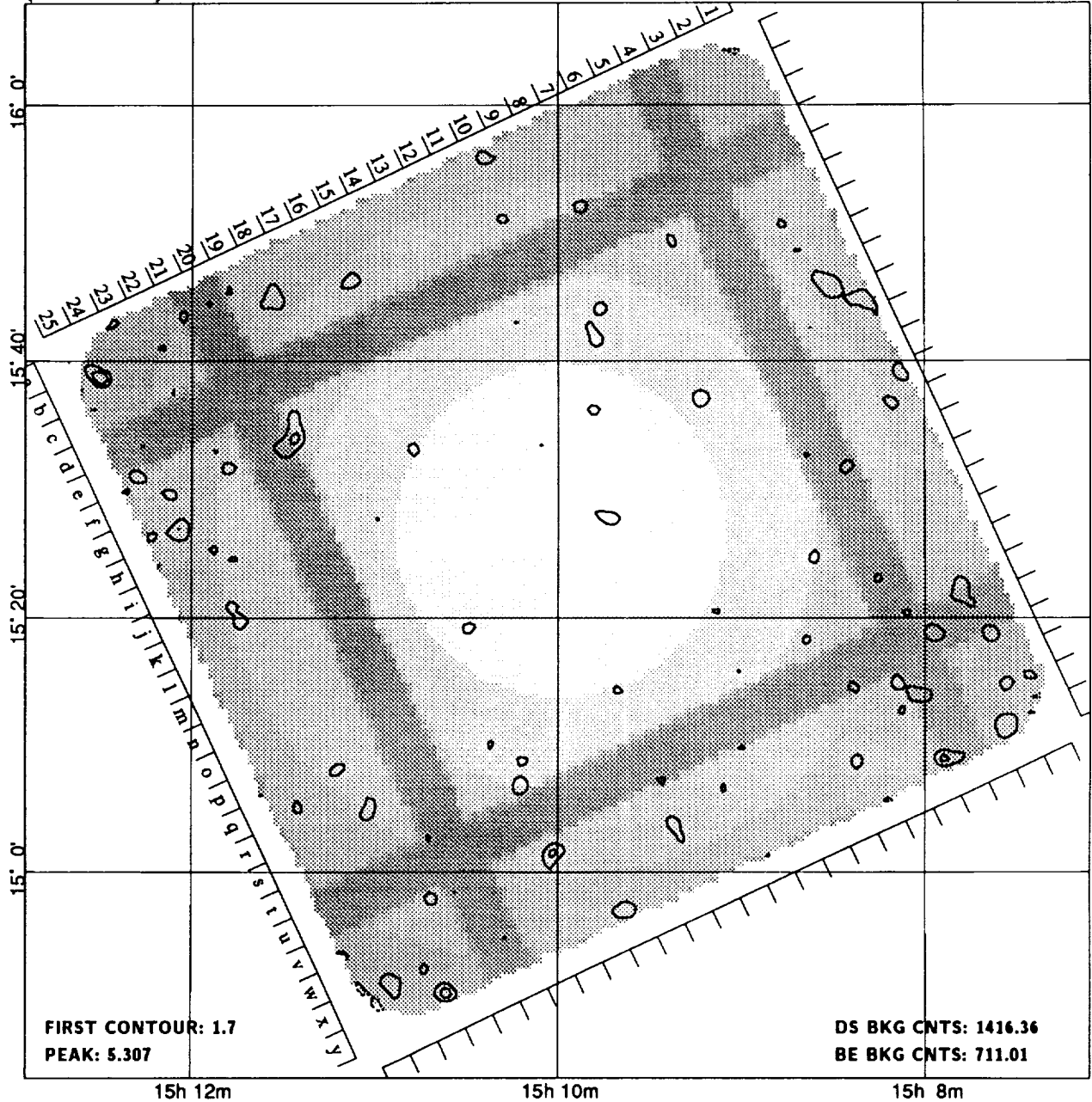
DATE: 1979/214 - 1979/214  
 LIVETIME: 1141.9s  
 ROLL ANGLE:  $78.9^\circ$

NH:  $6.6E+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 10m)

I 3088

(15h 10m)

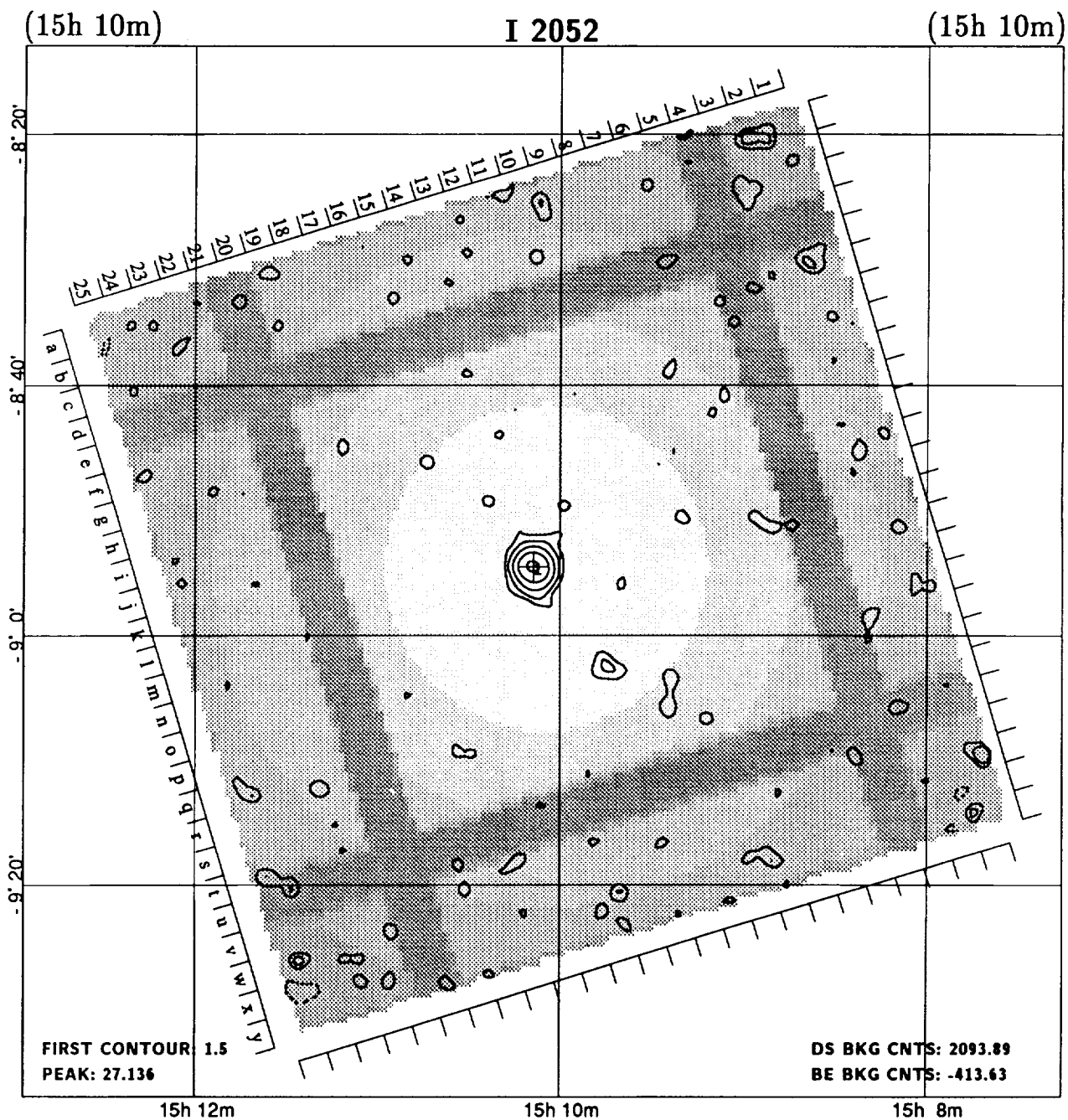


RADIO SOURCES WITH STEEP SPECTRA: 4C15.45

FIELD CENTER:  $15^{\text{h}}10^{\text{m}}00.0^{\text{s}}$   $15^{\circ}25'58''$  (B1950)  
 $15^{\text{h}}12^{\text{m}}20.2^{\text{s}}$   $15^{\circ}14'45''$  (J2000)  
 $l: 20.24$   $b: 55.22$

DATE: 1979/202 - 1979/202  
 LIVETIME: 1147.7s  
 ROLL ANGLE:  $65.0^{\circ}$

NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L



X-RAY STUDY OF QUASARS: PKS1510-089

FIELD CENTER:  $15^{\text{h}}10^{\text{m}}06.0^{\text{s}}$   $-08^{\circ}54'59''$  (B1950)  
 $15^{\text{h}}12^{\text{m}}47.6^{\text{s}}$   $-09^{\circ}06'12''$  (J2000)  
 $l: 351.27$   $b: 40.14$

DATE: 1979/215 - 1979/215  
 LIVETIME: 1696.7s  
 ROLL ANGLE:  $73.1^{\circ}$

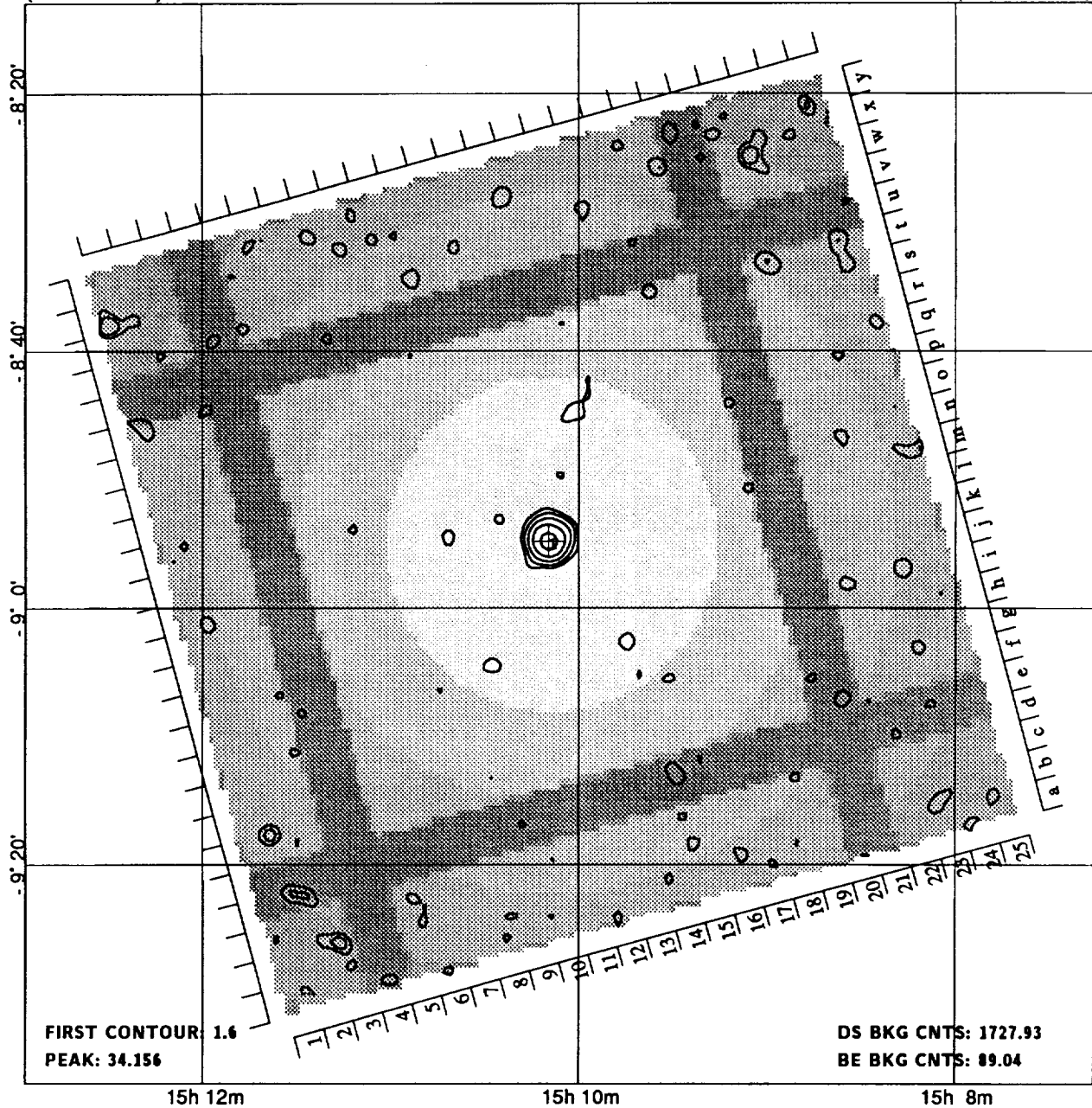
NH:  $7.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3390	1	15 10 08.8	-08 54 36	31	0.0910	0.0087	114.8	4.2	10.5	1.2	0	1.0	AH	Q

(15h 10m)

I 2053

(15h 10m)



## X-RAY STUDY OF QUASARS: PKS1510-089

FIELD CENTER:  $15^h 10^m 06.0^s$   $-08^\circ 54' 59''$  (B1950)  
 $15^h 12^m 47.6^s$   $-09^\circ 06' 12''$  (J2000)  
 $l: 351.27$   $b: 40.14$

DATE: 1980/ 41 - 1980/ 41  
 LIVETIME: 1400.2s  
 ROLL ANGLE:  $-105.3^\circ$

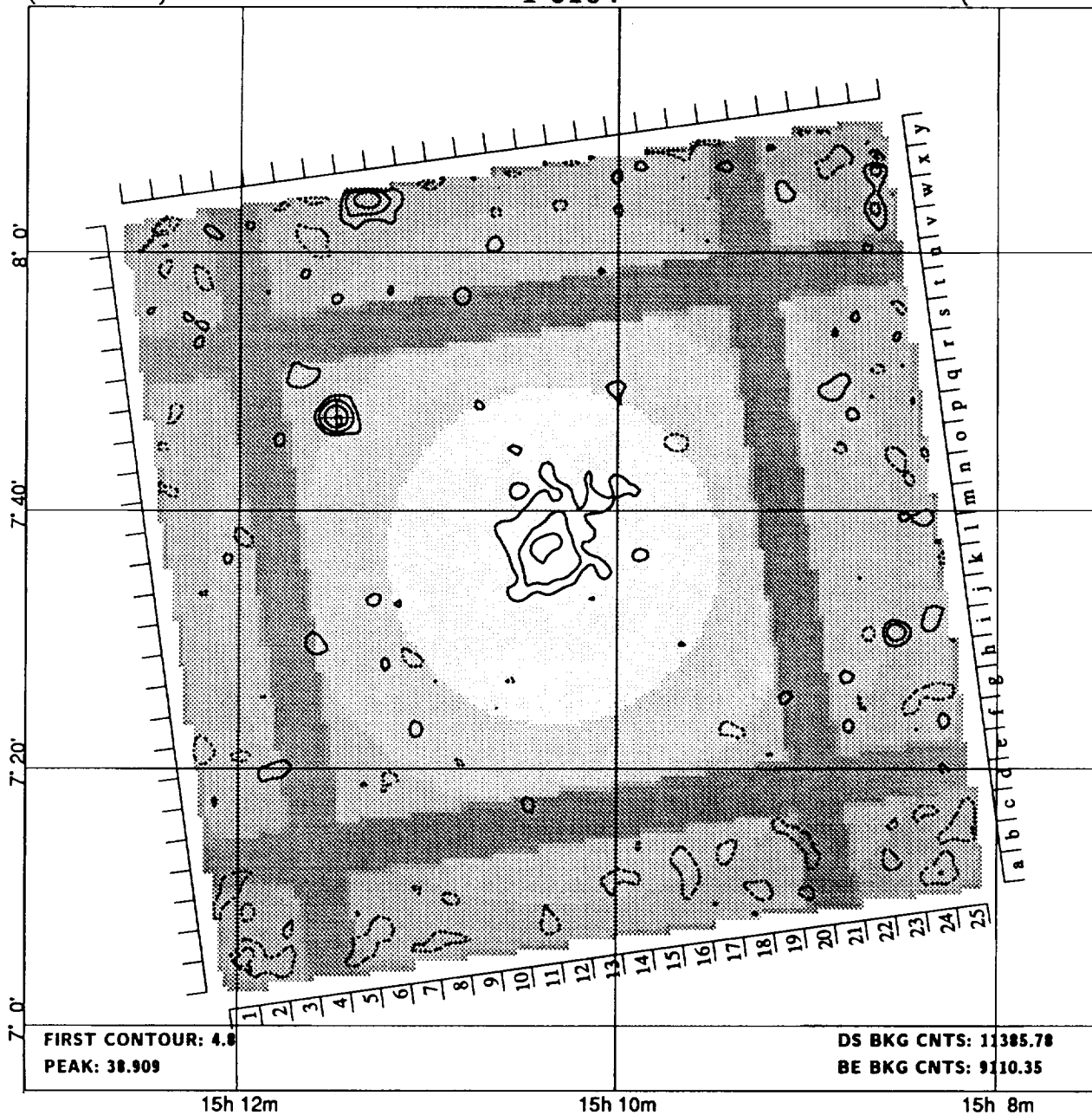
NH:  $7.6E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3390	1	15 10 09.7	-08 54 49	31	0.134	0.011	139.9	4.1	11.7	1.1	0	0.9	AH	Q

(15h 10m)

I 6104

(15h 10m)



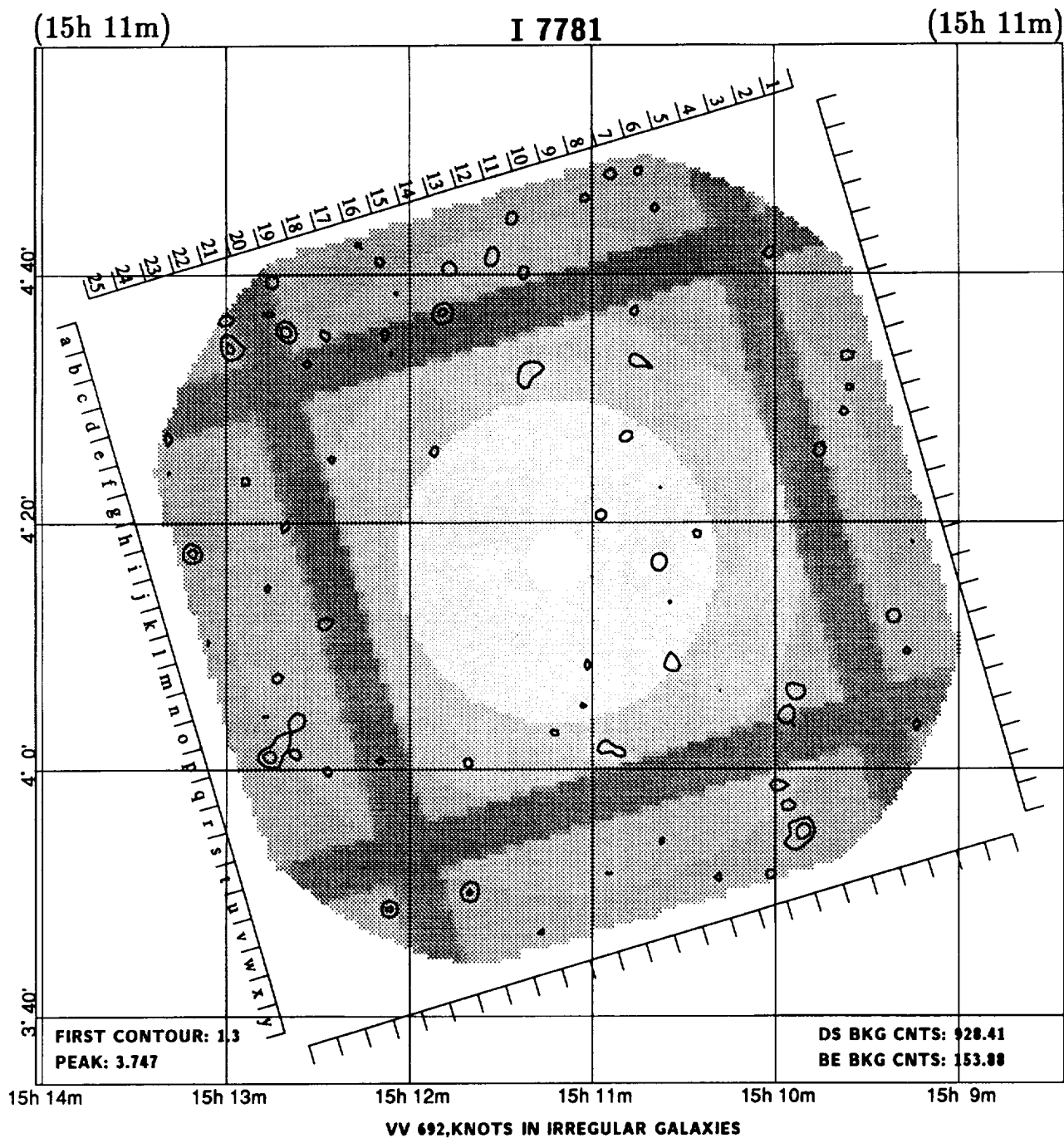
## A 2040, DETAILED STUDY OF NEARBY CLUSTERS

FIELD CENTER:  $15^h 10^m 18.0^s$   $07^\circ 36' 59''$  (B1950)  
 $15^h 12^m 45.2^s$   $07^\circ 25' 47''$  (J2000)  
 $l: 9.06$   $b: 51.17$

DATE: 1981/ 54 - 1981/ 54  
 LIVETIME: 9226.2s  
 ROLL ANGLE:  $-97.9^\circ$

NH:  $2.6E+20$   
 REF/ID: CLG  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3393	1L	15 11 29.4	07 47 14	48	0.0175	0.0028	82.0	40.0	6.1	0.9	0	20.6	



VV 692, KNOTS IN IRREGULAR GALAXIES

FIELD CENTER:  $15^{\text{h}}11^{\text{m}}13.8^{\text{s}}$   $04^{\circ}16'35''$  (B1950)  
 $15^{\text{h}}13^{\text{m}}43.9^{\text{s}}$   $04^{\circ}05'26''$  (J2000)  
 $l: 5.09$   $b: 48.99$

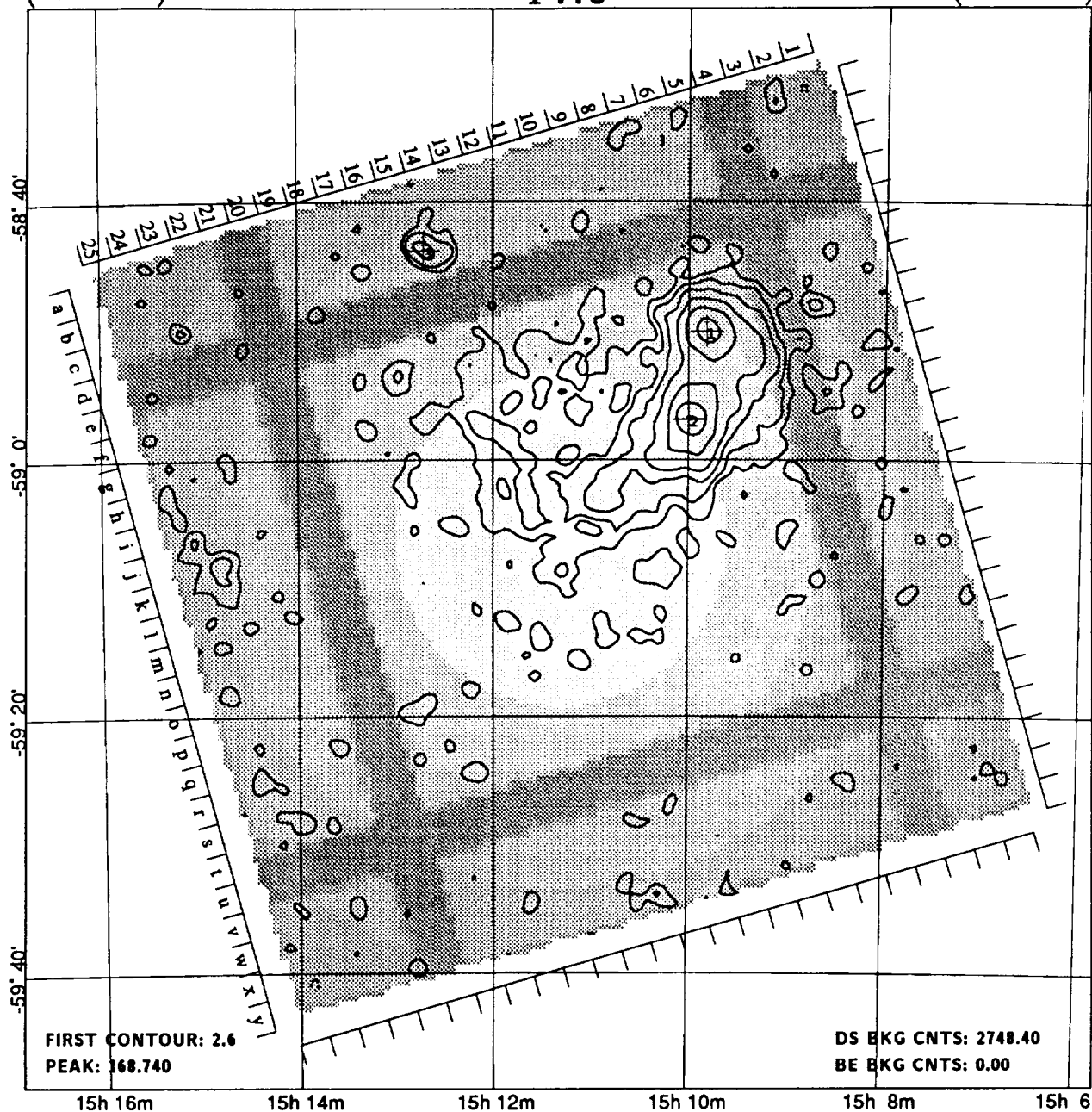
DATE: 1980/220 - 1980/220  
 LIVETIME: 752.3s  
 ROLL ANGLE:  $73.6^{\circ}$

NH:  $3.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 11m)

I 775

(15h 11m)



## MSH 15-52A/B SNR'S, SEARCH FOR X-RAY EMISSION

FIELD CENTER:  $15^h 11^m 20.0^s$   $-59^\circ 06' 59''$  (B1950) $15^h 15^m 17.5^s$   $-59^\circ 18' 06''$  (J2000) $l: 320.38$   $b: -1.39$ 

DATE: 1979/237 - 1979/237

LIVETIME: 2227.1s

ROLL ANGLE:  $74.1^\circ$ NH:  $1.5E+21$ 

REF/ID: \*

FIELD FLAGS: L

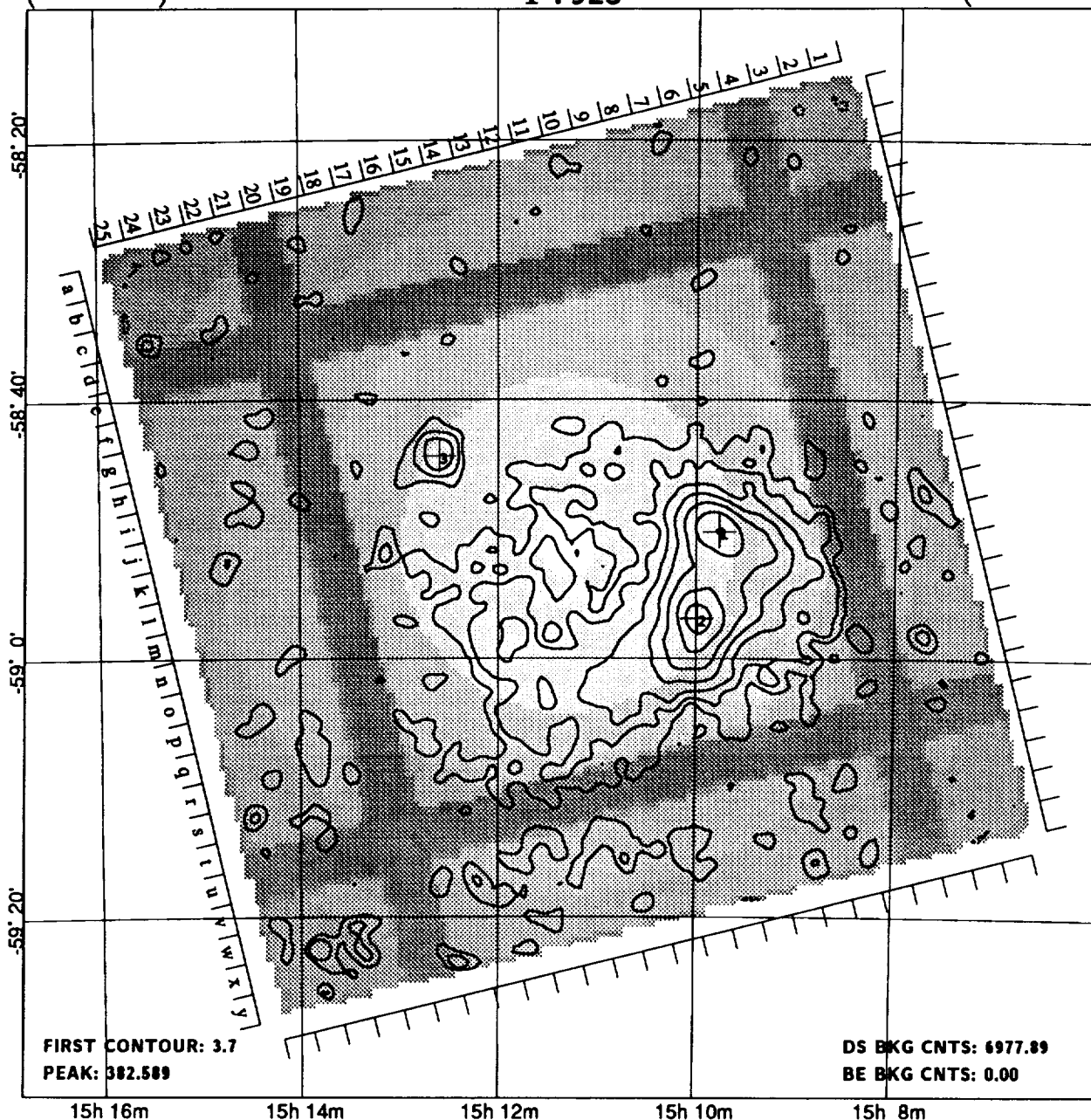
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3388	1L	15 09 49.0	-58 50 04	47	0.196	0.020	224.7	141.3	9.6	8.5	0	20.5	A	SNR
3389	2L	15 09 59.4	-58 56 50	37	0.280	0.021	381.0	196.0	13.2	6.3	0	14.5	A	P
3400	3L	15 12 42.4	-58 43 47	52	0.0284	0.0074	27.2	9.8	3.7	1.3	0	25.5	A	*



(15h 11m)

I 7925

(15h 11m)



SNR MSH 15-52 A/B FOLLOW-UP

FIELD CENTER:  $15^h 11^m 20.0^s$   $-58^\circ 51' 59''$  (B1950)

DATE: 1980/228 - 1980/228

NH: 1.5E+21

 $15^h 15^m 16.7^s$   $-59^\circ 03' 06''$  (J2000)

LIVETIME: 5654.4s

REF/ID: SNR

 $\ell$ : 320.51  $b$ : -1.18

ROLL ANGLE: 76.2°

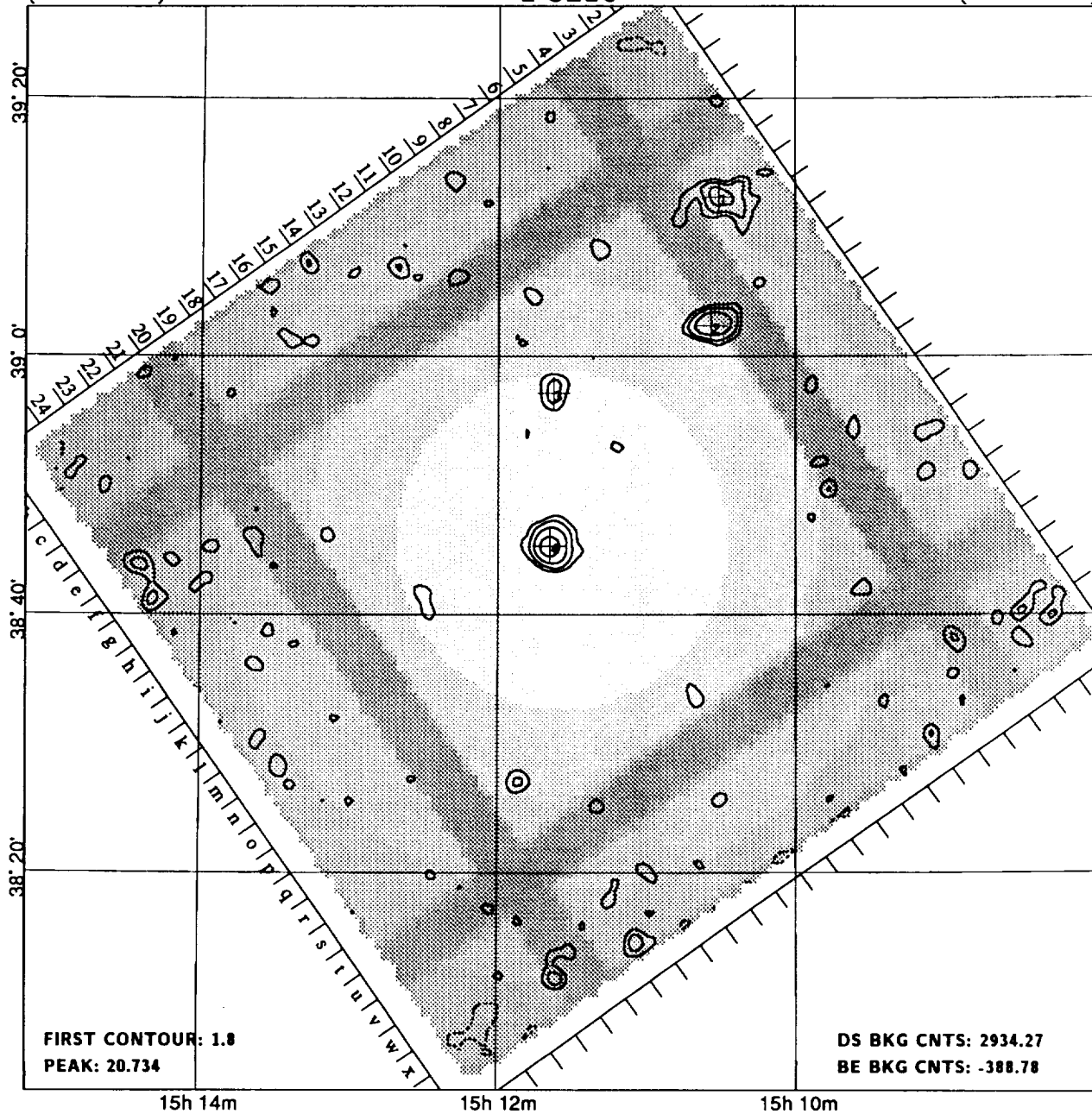
FIELD FLAGS: DL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3388	1L	15 09 46.1	-58 50 12	37	0.162	0.011	589.2	470.8	14.7	9.9	0	12.3	A	SNR
3389	2L	15 09 59.3	-58 56 54	37	0.240	0.012	876.8	556.2	19.1	7.0	0	11.5	A	P
3400	3L	15 12 35.7	-58 44 20	38	0.0259	0.0037	92.9	34.1	6.9	1.4	0	12.1	A	*

(15h 11m)

I 3216

(15h 11m)



RS CVN SYSTEMS: SS BOO

FIELD CENTER:  $15^{\text{h}}11^{\text{m}}35.0^{\text{s}}$   $38^{\circ}45'11''$  (B1950)  
 $15^{\text{h}}13^{\text{m}}28.9^{\text{s}}$   $38^{\circ}34'03''$  (J2000)  
 $l: 63.16$   $b: 58.29$

DATE: 1979/191 - 1979/191  
 LIVETIME: 2377.7s  
 ROLL ANGLE:  $54.8^{\circ}$

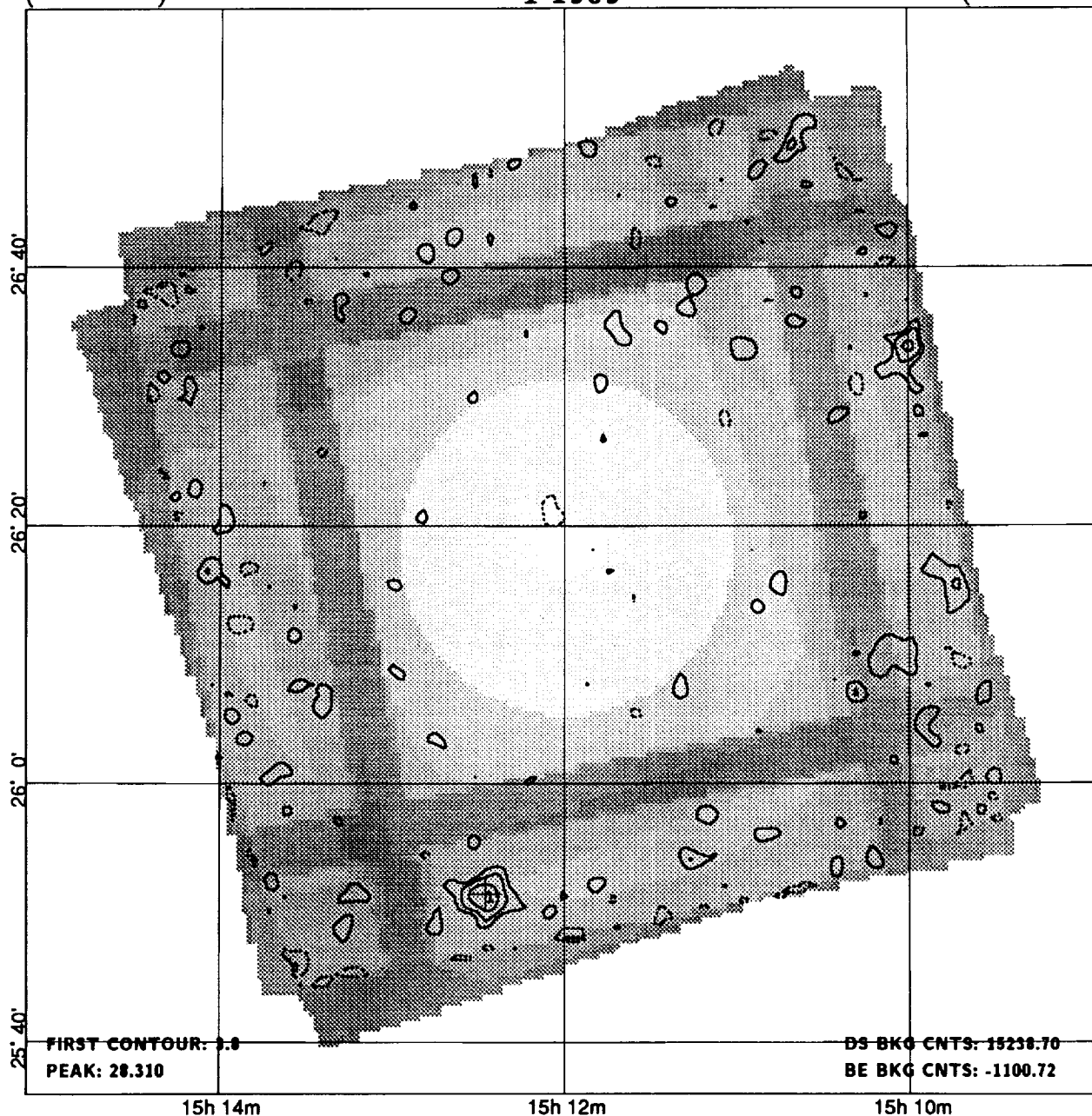
NH:  $1.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3391	1	15 10 30.9	39 12 23	55	0.0197	0.0053	17.0	4.0	3.7	1.4	300	29.7	H	
3392	2	15 10 34.0	39 02 23	50	*0.0336	0.0055	40.3	3.7	6.1	1.1	806	21.3	H	Q
3394	3	15 11 37.6	38 57 10	47	0.0120	0.0032	18.5	5.5	3.8	0.7	0	12.2		
3395	4	15 11 39.0	38 45 21	31	0.0473	0.0054	83.5	6.5	8.8	1.1	0	0.9	H	CV

(15h 12m)

I 1909

(15h 12m)



## X-RAY STUDY OF RADIO GALAXIES: 3C315

FIELD CENTER:  $15^{\text{h}}12^{\text{m}}00.0^{\text{s}}$   $26^{\circ}17'59''$  (B1950)  
 $15^{\text{h}}14^{\text{m}}09.2^{\text{s}}$   $26^{\circ}06'52''$  (J2000)  
 $l: 39.38$   $b: 58.19$

DATE: 1979/ 29 - 1980/226  
 LIVETIME: 12348.4s

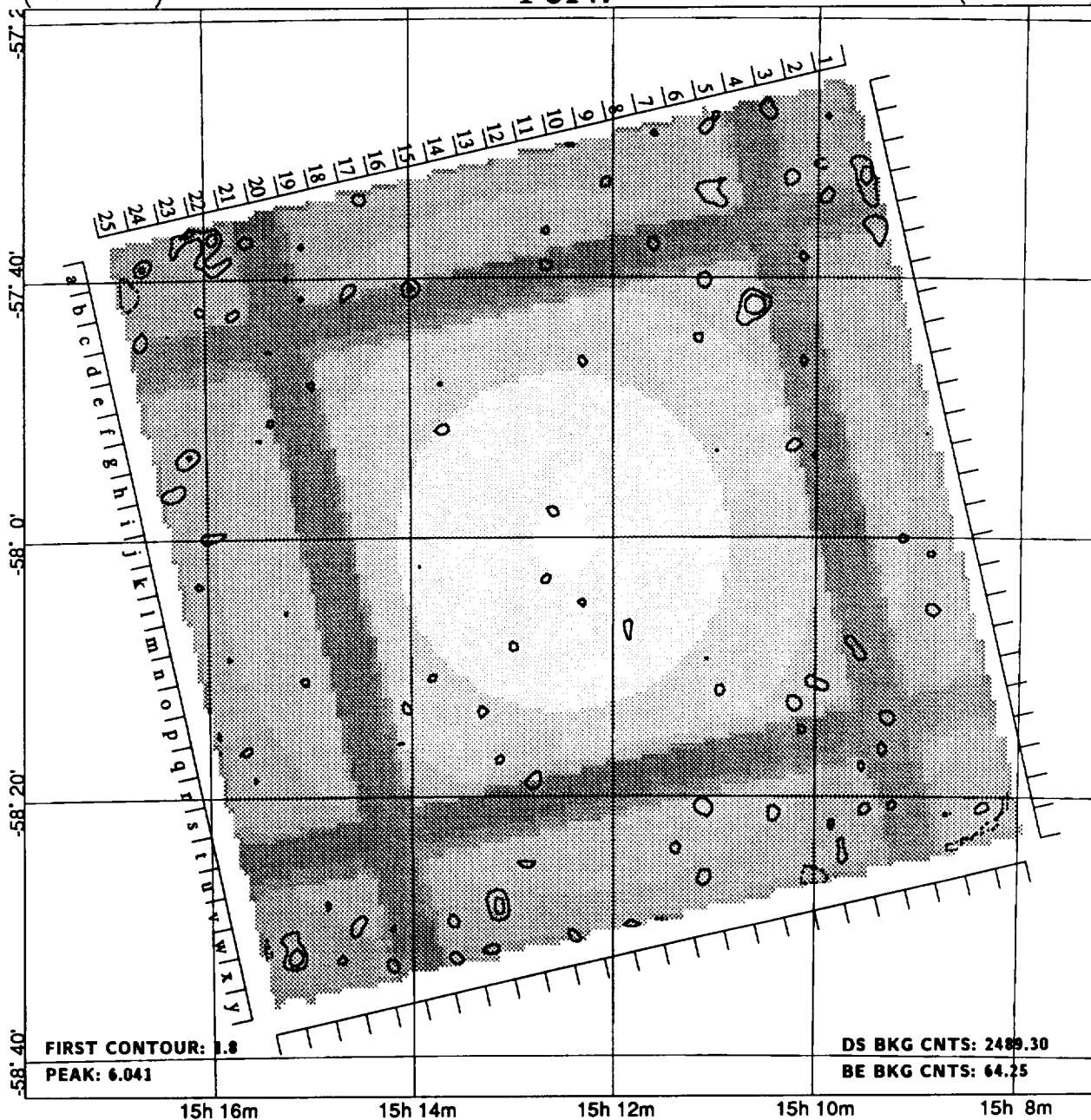
NH:  $3.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3398	1	15 12 27.5	25 51 25	50	0.0127	0.0019	61.1	22.9	6.7	1.3	0	27.3	H	

(15h 12m)

I 5147

(15h 12m)

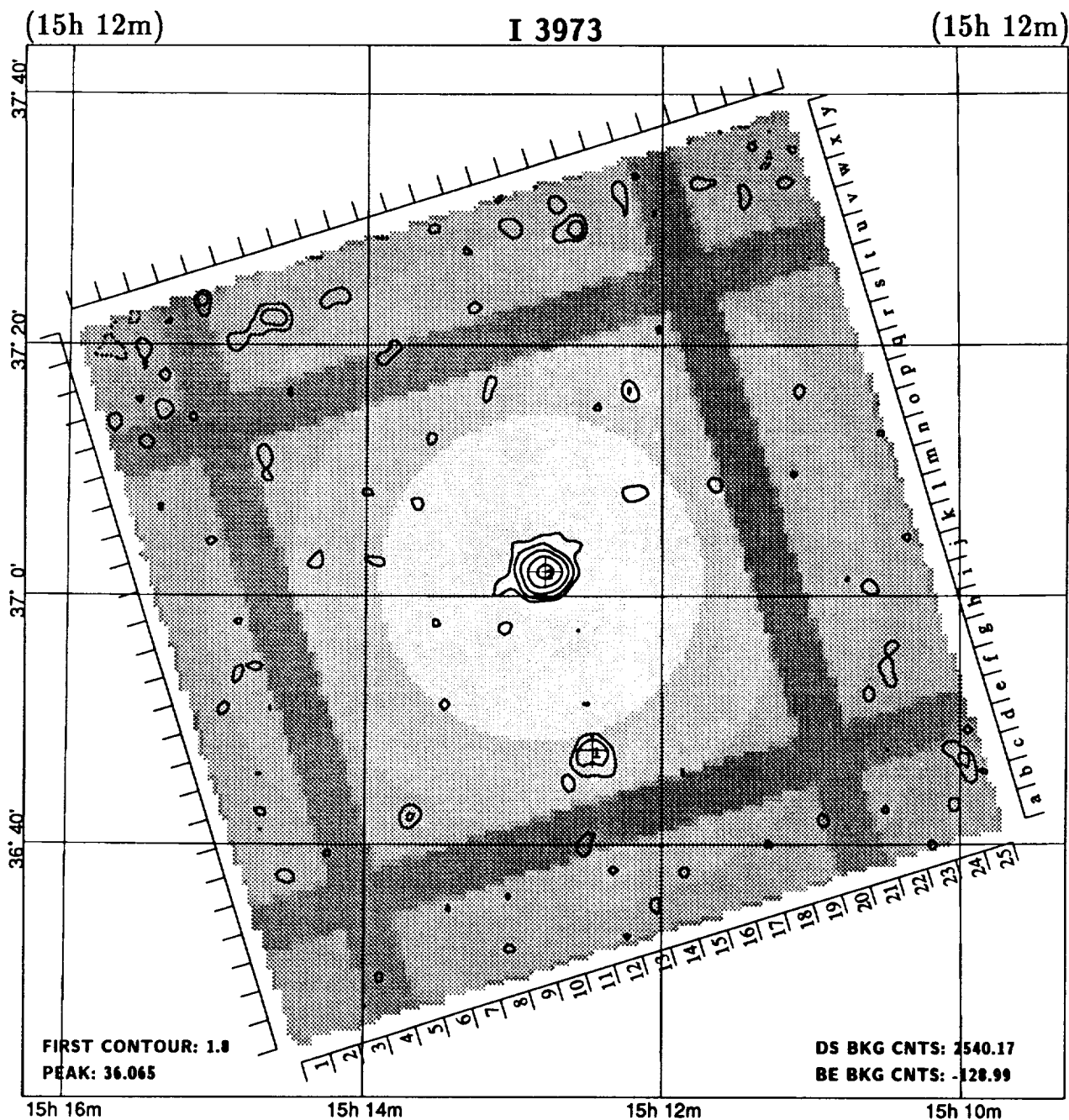


## RADIO SOURCES NEAR COS-B GAMMA SOURCES #2

FIELD CENTER:  $15^{\text{h}}12^{\text{m}}31.2^{\text{s}}$   $-58^{\circ}01'11''$  (B1950)  
 $15^{\text{h}}16^{\text{m}}25.5^{\text{s}}$   $-58^{\circ}12'14''$  (J2000)  
 $l$ : 321.08  $b$ : -0.54

DATE: 1980/227 - 1980/227  
 LIVETIME: 2017.2s  
 ROLL ANGLE: 77.4°

NH: 1.6E+21  
 REF/ID:  
 FIELD FLAGS:



**1512+370, BRIGHT NEARBY QUASAR**

FIELD CENTER:  $15^h 12^m 46.9^s$   $37^\circ 01' 55''$  (B1950)  
 $15^h 14^m 43.0^s$   $36^\circ 50' 51''$  (J2000)  
 $l: 59.86$   $b: 58.31$

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 2058.4s  
 ROLL ANGLE:  $-107.2^\circ$

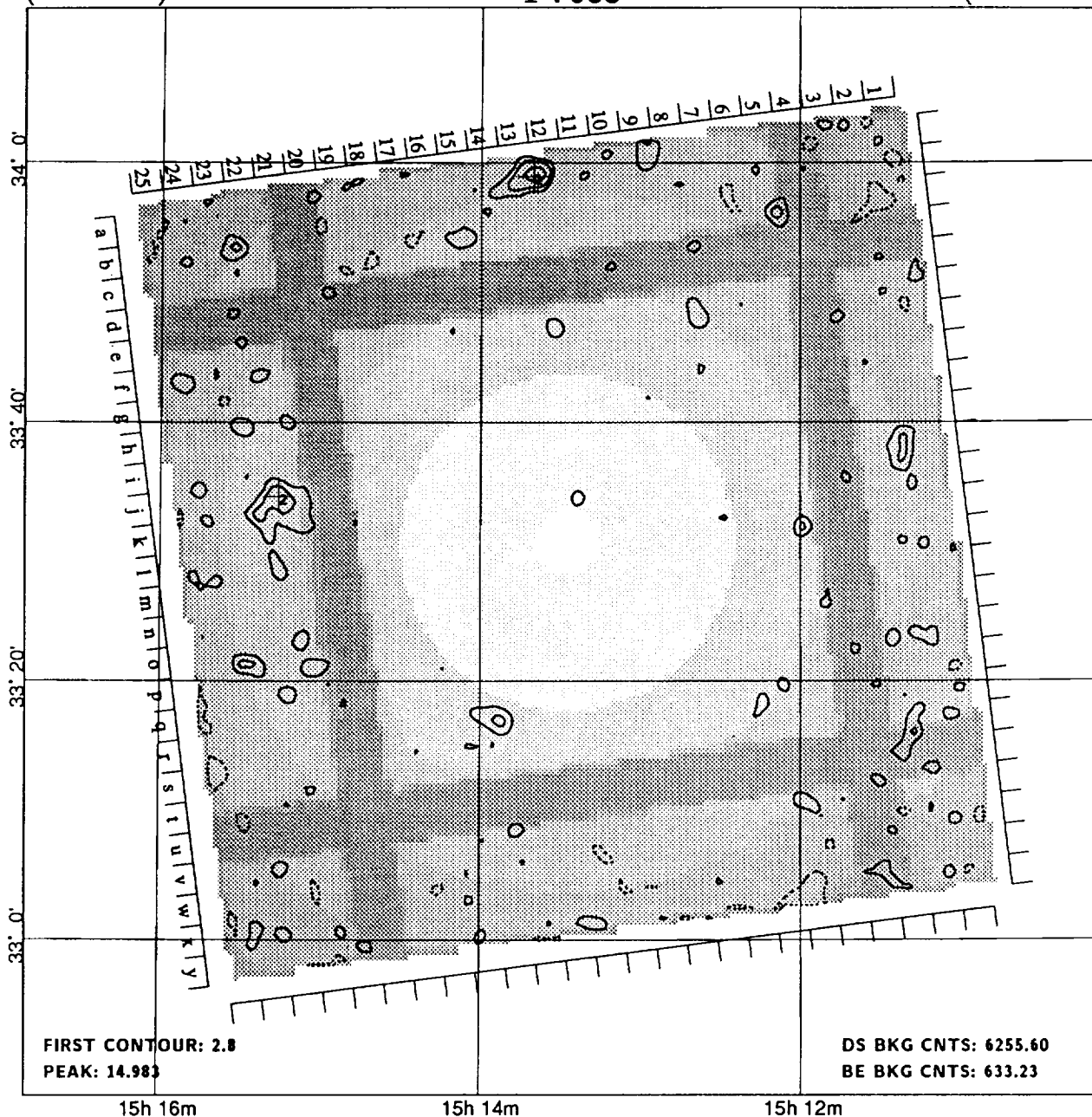
NH:  $1.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3399	1	15 12 28.0	36 47 34	45	0.0200	0.0044	24.7	4.3	4.6	1.1	0	14.7	H	
3401	2	15 12 47.5	37 01 56	31	0.0960	0.0081	147.2	5.8	11.9	1.3	0	0.4	H	Q

(15h 13m)

I 7683

(15h 13m)



## DEL BOO, CORONAE/WINDS DIVISION AMONG LATE-TYPE STARS

FIELD CENTER:  $15^h 13^m 29.1^s$   $33^\circ 30' 00''$  (B1950)  
 $15^h 15^m 29.8^s$   $33^\circ 18' 58''$  (J2000)  
 $l: 53.12$   $b: 58.43$

DATE: 1980/229 - 1980/230  
 LIVETIME: 5069.1s  
 ROLL ANGLE:  $82.8^\circ$

NH:  $1.6E+20$   
 REF/ID:  
 FIELD FLAGS:

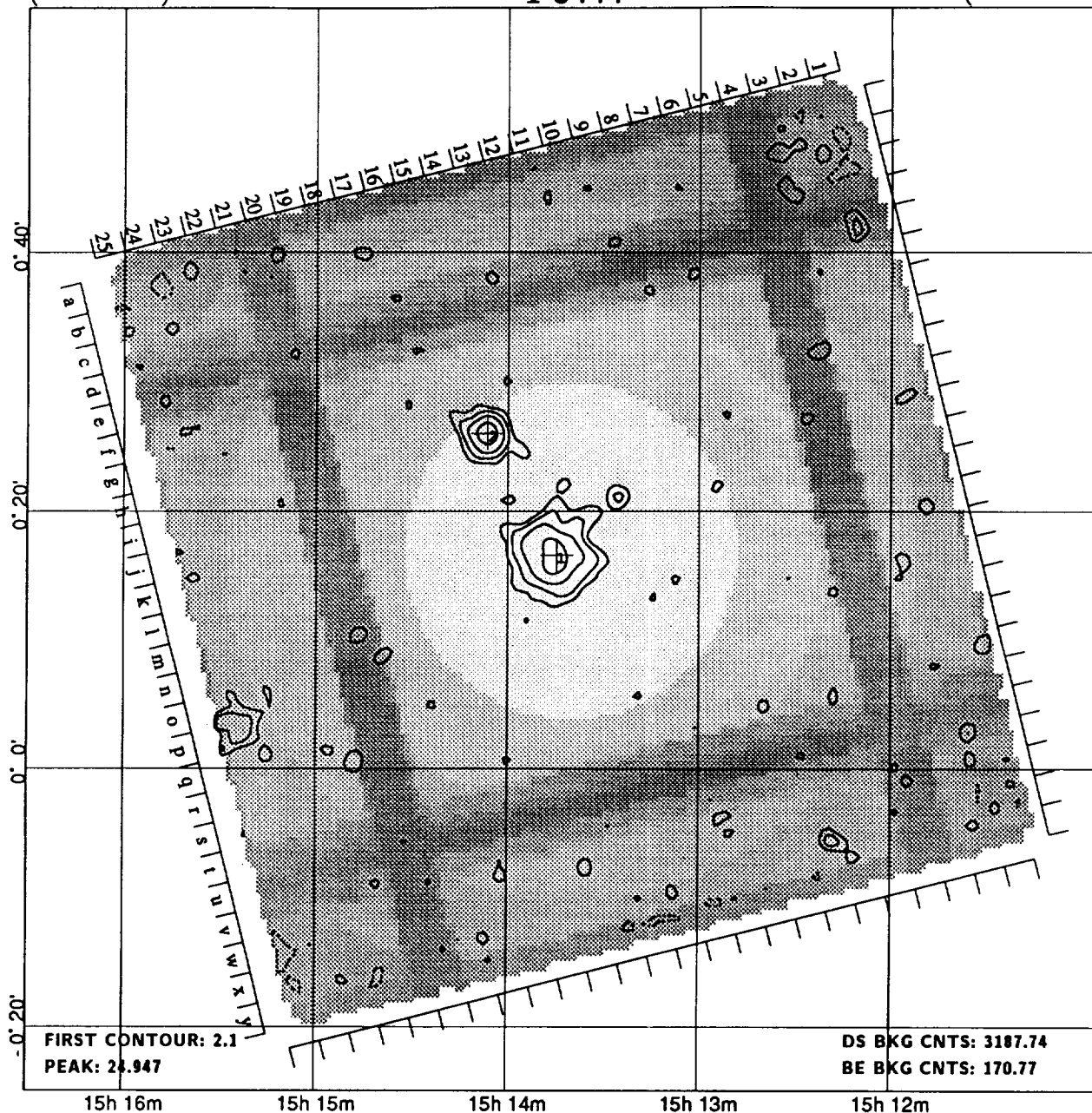
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID FLG
3402	1	15 13 40.2	33 58 56	51	0.0166	0.0034	31.6	11.4	4.8	1.1	400	29.0	H
3409	2	15 15 15.8	33 34 13	56	0.0089	0.0024	20.9	12.1	3.6	1.8	100	22.7	H



(15h 13m)

I 3444

(15h 13m)



## A 2050, MAGNETIC FIELDS IN CLUSTERS OF GALAXIES

FIELD CENTER:  $15^h 13^m 42.0^s$   $00^\circ 16' 59''$  (B1950)  
 $15^h 16^m 15.6^s$   $00^\circ 05' 59''$  (J2000)  
 $l: 1.12$   $b: 45.97$

DATE: 1979/227 - 1979/228  
 LIVETIME: 2583.1s  
 ROLL ANGLE:  $75.9^\circ$

NH:  $4.4E+20$   
 REF/ID:  
 FIELD FLAGS:

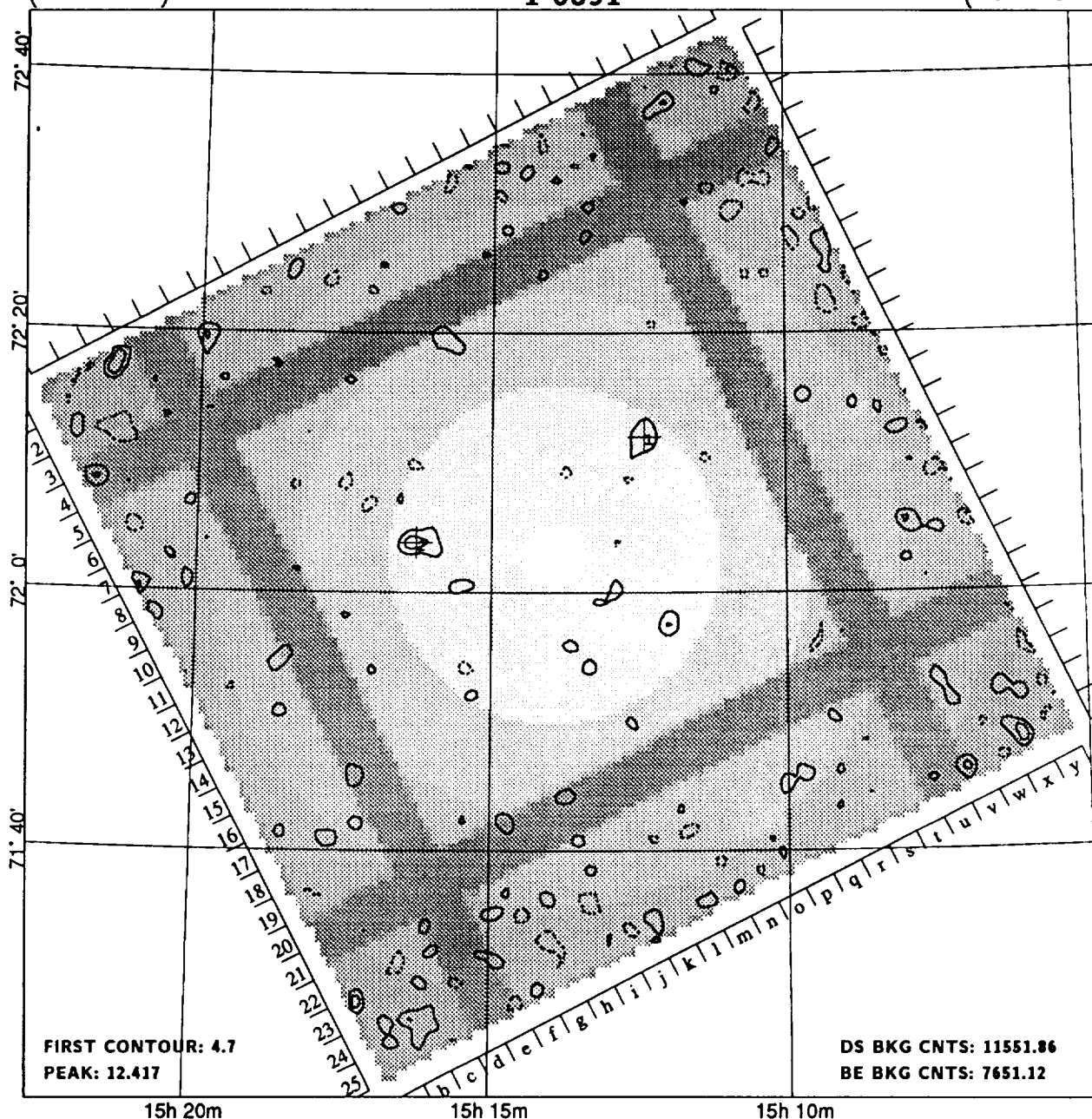
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3404	1	15 13 44.6	00 16 35	31	0.0577	0.0057	111.1	8.9	10.1	2.5	0	0.8	H	
3406	2	15 14 06.5	00 26 01	38	0.0481	0.0056	80.9	7.1	8.6	1.2	0	10.9	H	



(15h 13m)

I 6891

(15h 13m)



A2058, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER: 15<sup>h</sup>13<sup>m</sup>48.0<sup>s</sup> 72°02'59" (B1950)  
15<sup>h</sup>13<sup>m</sup>48.3<sup>s</sup> 71°51'54" (J2000)  
ℓ: 109.00 b: 41.19

DATE: 1980/103 - 1980/103  
LIVETIME: 9697.0s  
ROLL ANGLE: -27.1°

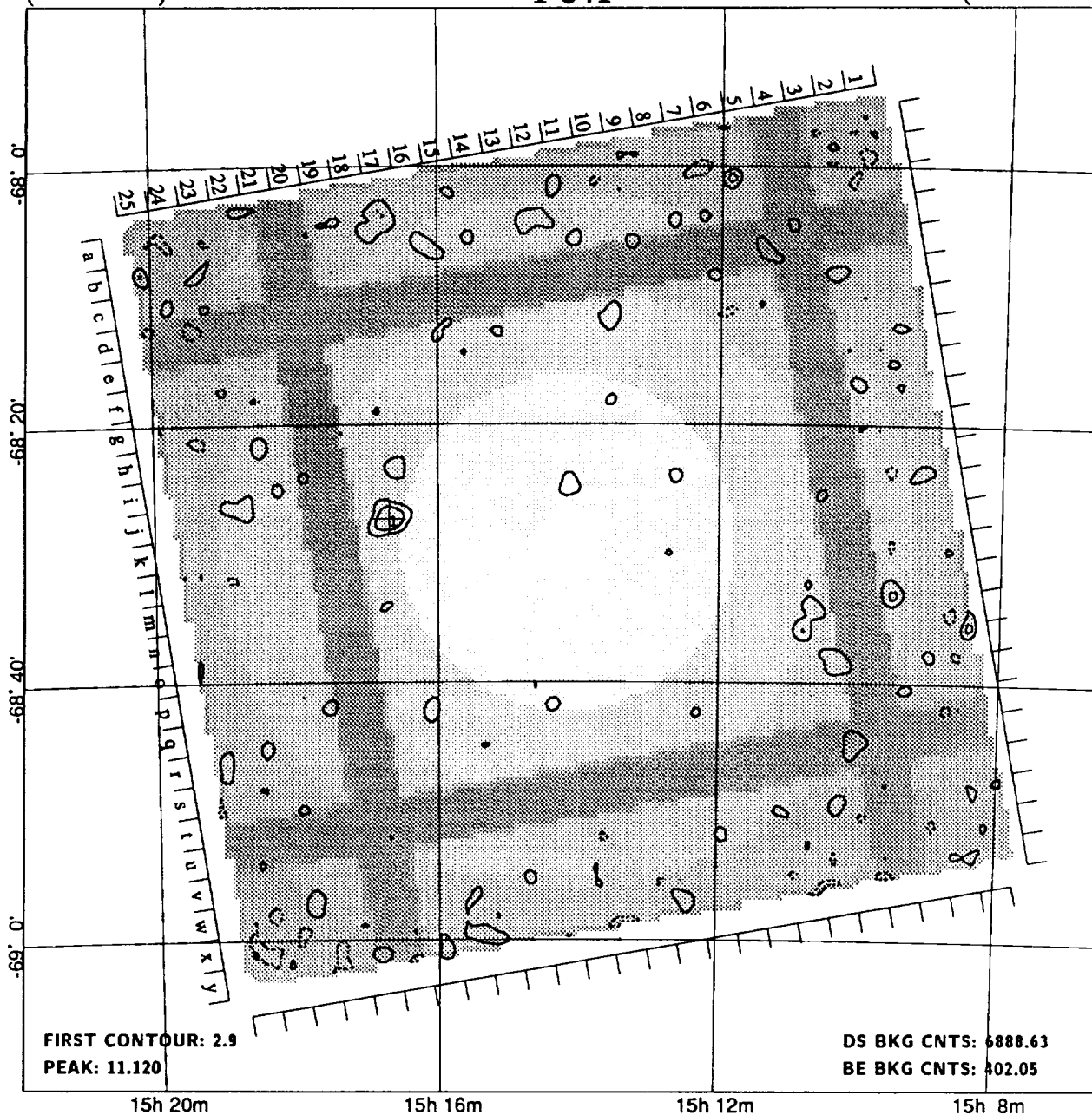
NH: 2.1E+20  
REF/ID: CLG  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3397	1	15 12 24.3	72 11 59	42	0.0051	0.0015	32.1	50.9	3.5	0.7	0	10.9		
3411	2	15 16 16.9	72 03 51	42	0.0060	0.0014	38.1	45.9	4.2	1.0	0	11.9	H	

(15h 14m)

I 841

(15h 14m)



## GAMMA TRA STELLAR OBSERVATIONS, A STARS

FIELD CENTER:  $15^{\text{h}}14^{\text{m}}12.6^{\text{s}}$   $-68^{\circ}29'48''$  (B1950)  
 $15^{\text{h}}18^{\text{m}}55.2^{\text{s}}$   $-68^{\circ}40'44''$  (J2000)  
 $l: 315.71$   $b: -9.55$

DATE: 1979/226 - 1979/226  
 LIVETIME: 5582.1s  
 ROLL ANGLE:  $80.3^{\circ}$

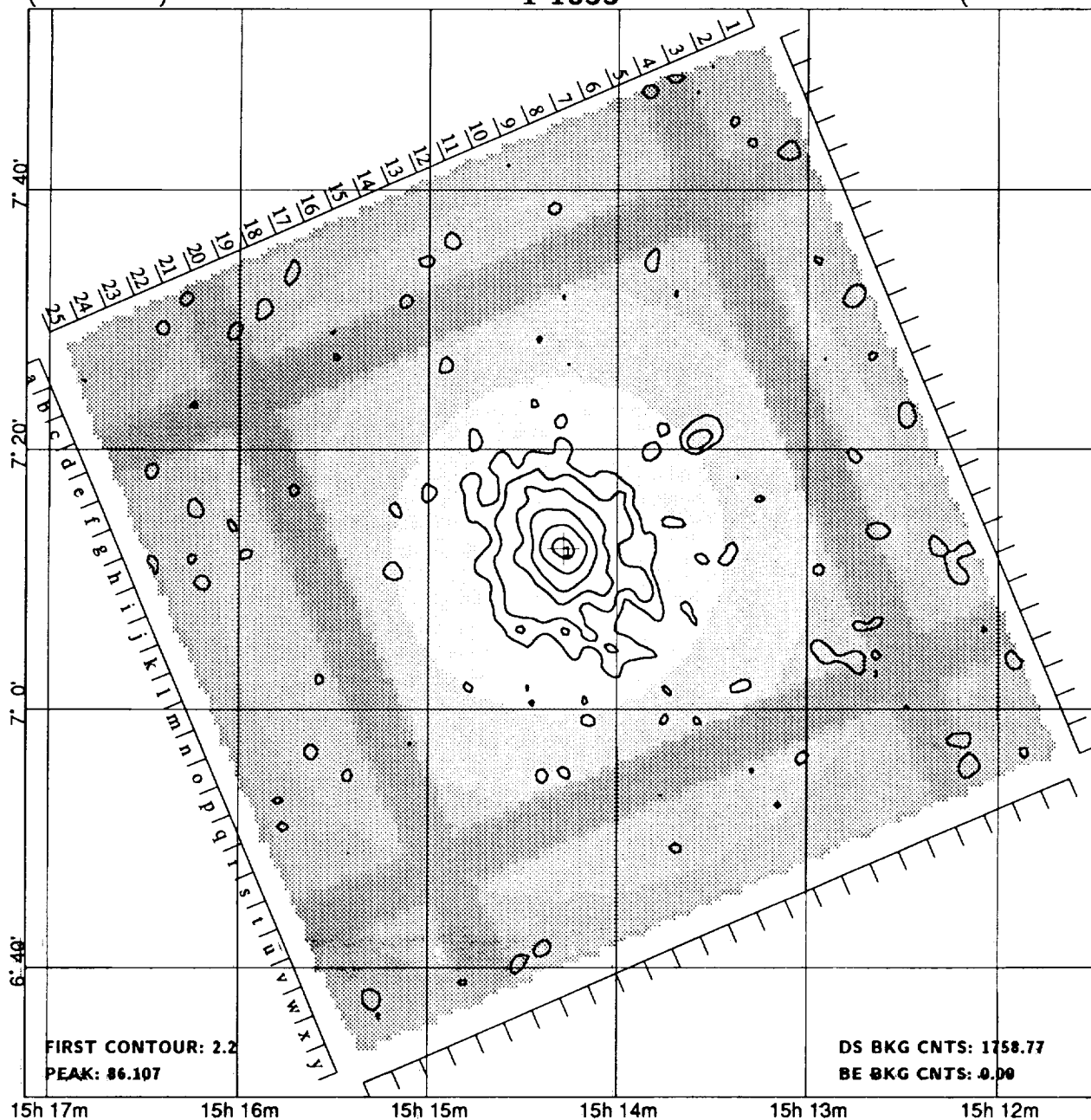
NH:  $8.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3413	1	15 16 41.7	-68 27 14	42	0.0106	0.0021	35.6	14.4	5.0	0.8	0	14.0	H

(15h 14m)

I 1853

(15h 14m)

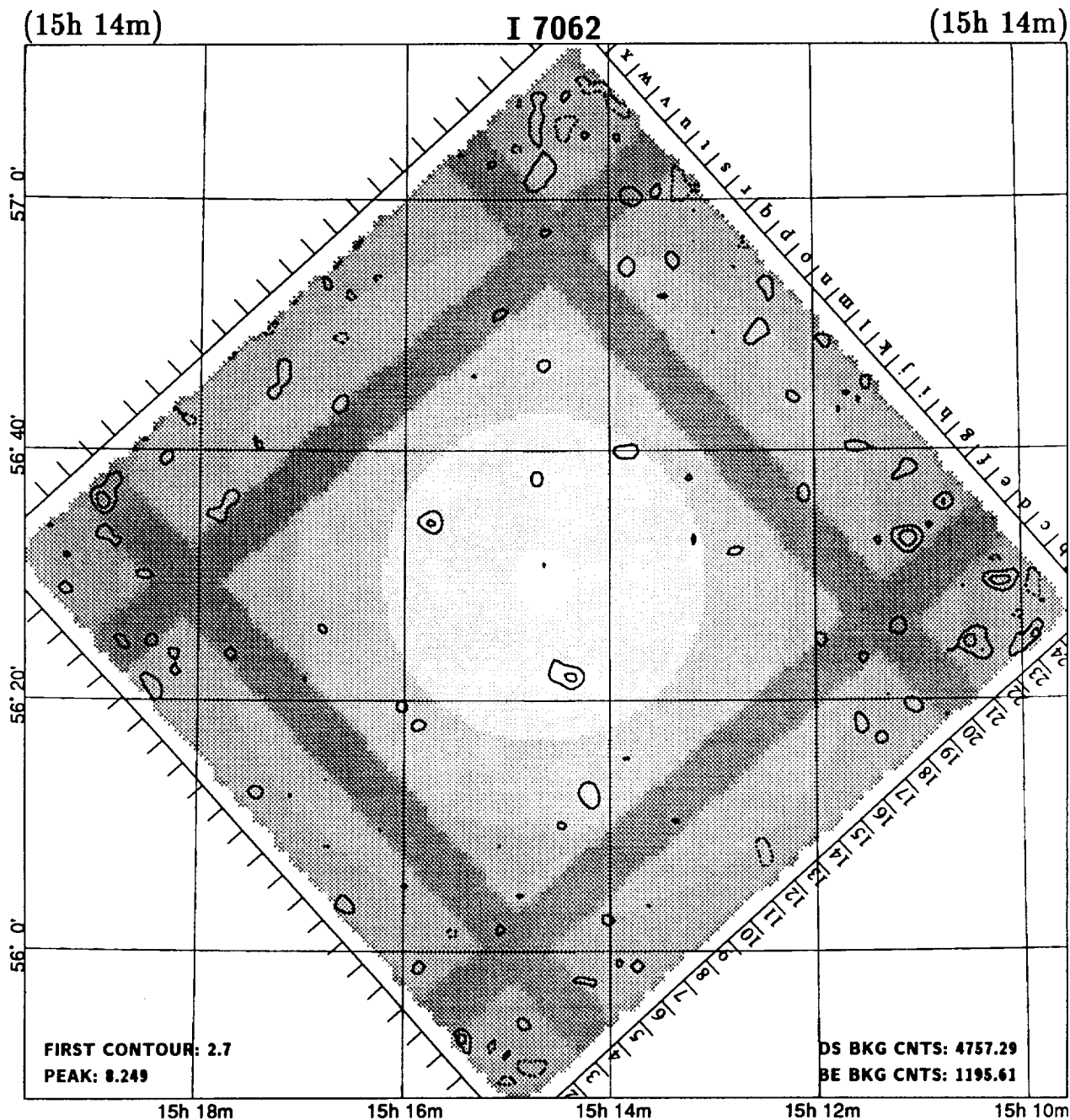
**A2052: X-RAY STUDY OF CLUSTERS OF GALAXIES**

FIELD CENTER:  $15^{\text{h}}14^{\text{m}}18.0^{\text{s}}$   $07^{\circ}11'59''$  (B1950)  
 $15^{\text{h}}16^{\text{m}}45.5^{\text{s}}$   $07^{\circ}01'00''$  (J2000)  
 $l: 9.41$   $b: 50.11$

DATE: 1979/203 - 1979/203  
 LIVETIME: 1425.2s  
 ROLL ANGLE:  $66.9^{\circ}$

NH:  $2.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3407	1L	15 14 17.1	07 12 22	31	0.216	0.023	229.2	179.8	9.2	3.6	0	0.4		CLG



**NGC 5907, LATE GALAXY SURVEY**

**FIELD CENTER:**  $15^{\text{h}}14^{\text{m}}37.0^{\text{s}}$   $56^{\circ}30'23''$  (B1950)  
 $15^{\text{h}}15^{\text{m}}55.0^{\text{s}}$   $56^{\circ}19'24''$  (J2000)  
 $l$ : 91.57  $b$ : 51.09

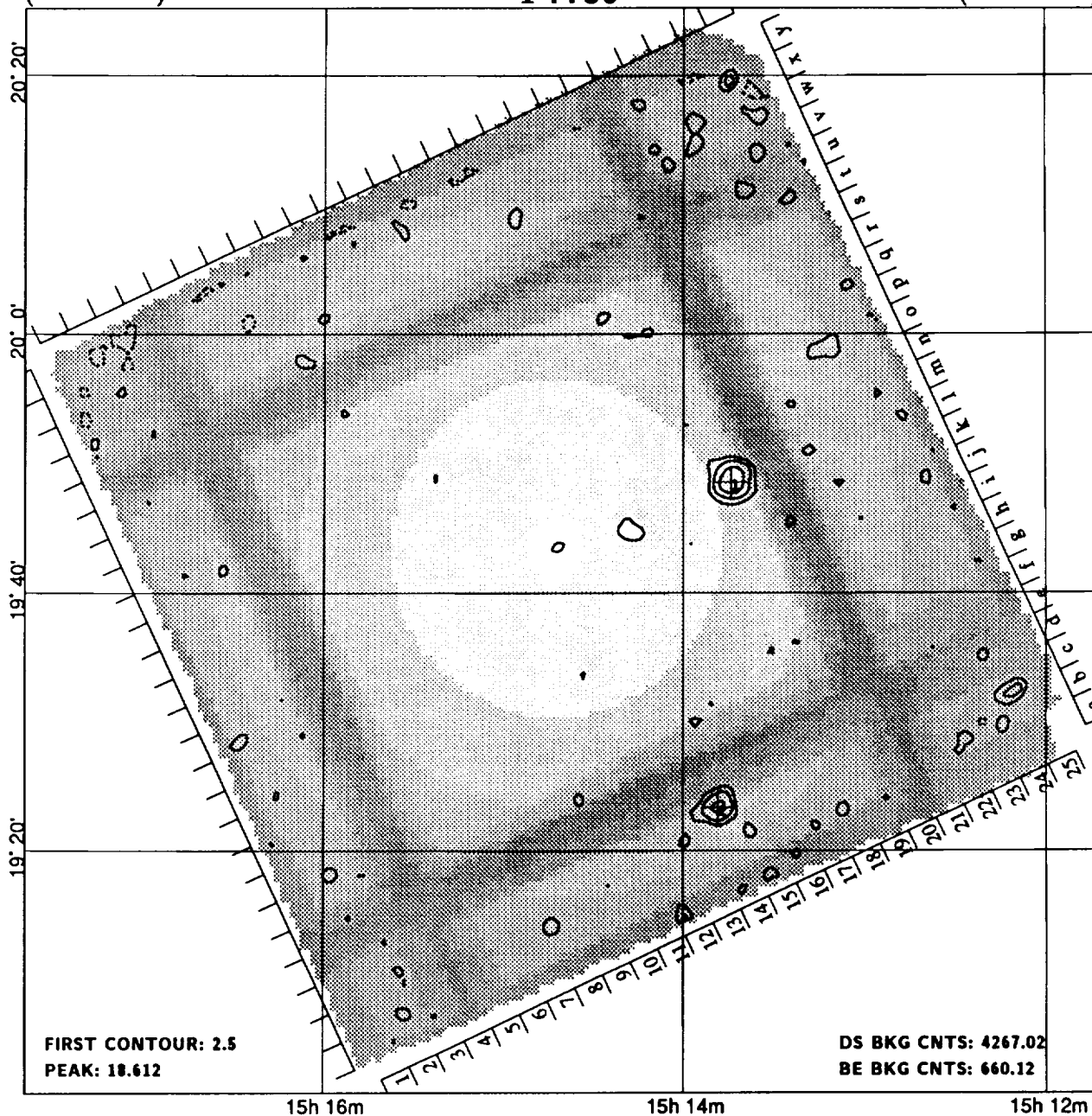
**DATE:** 1980/ 2 - 1980/ 2  
**LIVETIME:** 3855.0s  
**ROLL ANGLE:** -132.0°

**NH:**  $1.4\text{E}+20$   
**REF/ID:**  
**FIELD FLAGS:**

(15h 14m)

I 7736

(15h 14m)



## 1514+197, FAINT BL LAC OBJECTS

FIELD CENTER:  $15^{\text{h}}14^{\text{m}}41.0^{\text{s}}$   $19^{\circ}43'11''$  (B1950)  
 $15^{\text{h}}16^{\text{m}}56.8^{\text{s}}$   $19^{\circ}32'13''$  (J2000)  
 $l: 27.99$   $b: 55.87$

DATE: 1980/ 22 - 1980/ 22  
 LIVETIME: 3457.7s  
 ROLL ANGLE:  $-115.1^{\circ}$

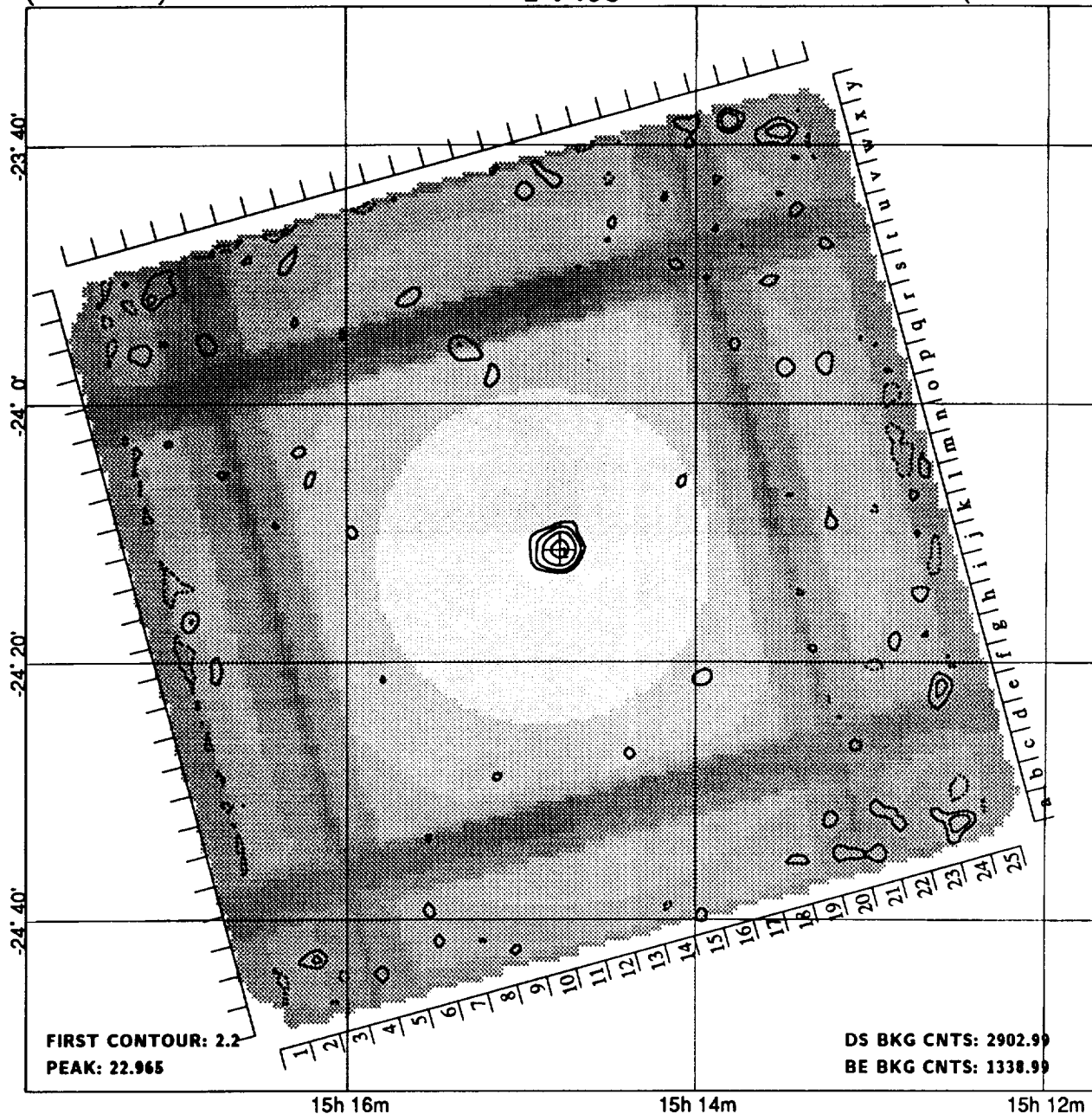
NH:  $3.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3403	1	15 13 44.1	19 48 32	41	*0.0296	0.0041	61.2	9.8	7.3	1.1	501	14.5	H
3405	2	15 13 48.4	19 23 21	51	*0.0155	0.0036	24.4	7.6	4.3	0.9	704	23.2	

(15h 14m)

I 7493

(15h 14m)



PKS 1514-242A, TEMPORAL STUDIES OF FLUXES & SPECTRA OF BL LAC OBJECTS

FIELD CENTER:  $15^h 14^m 45.0^s$   $-24^\circ 11' 19''$  (B1950)  
 $15^h 17^m 41.5^s$   $-24^\circ 22' 16''$  (J2000)  
 $l: 340.68$   $b: 27.58$

DATE: 1981/ 41 - 1981/ 41  
 LIVETIME: 2352.4s  
 ROLL ANGLE:  $-105.2^\circ$

NH:  $8.8E+20$   
 REF/ID:  
 FIELD FLAGS: CL

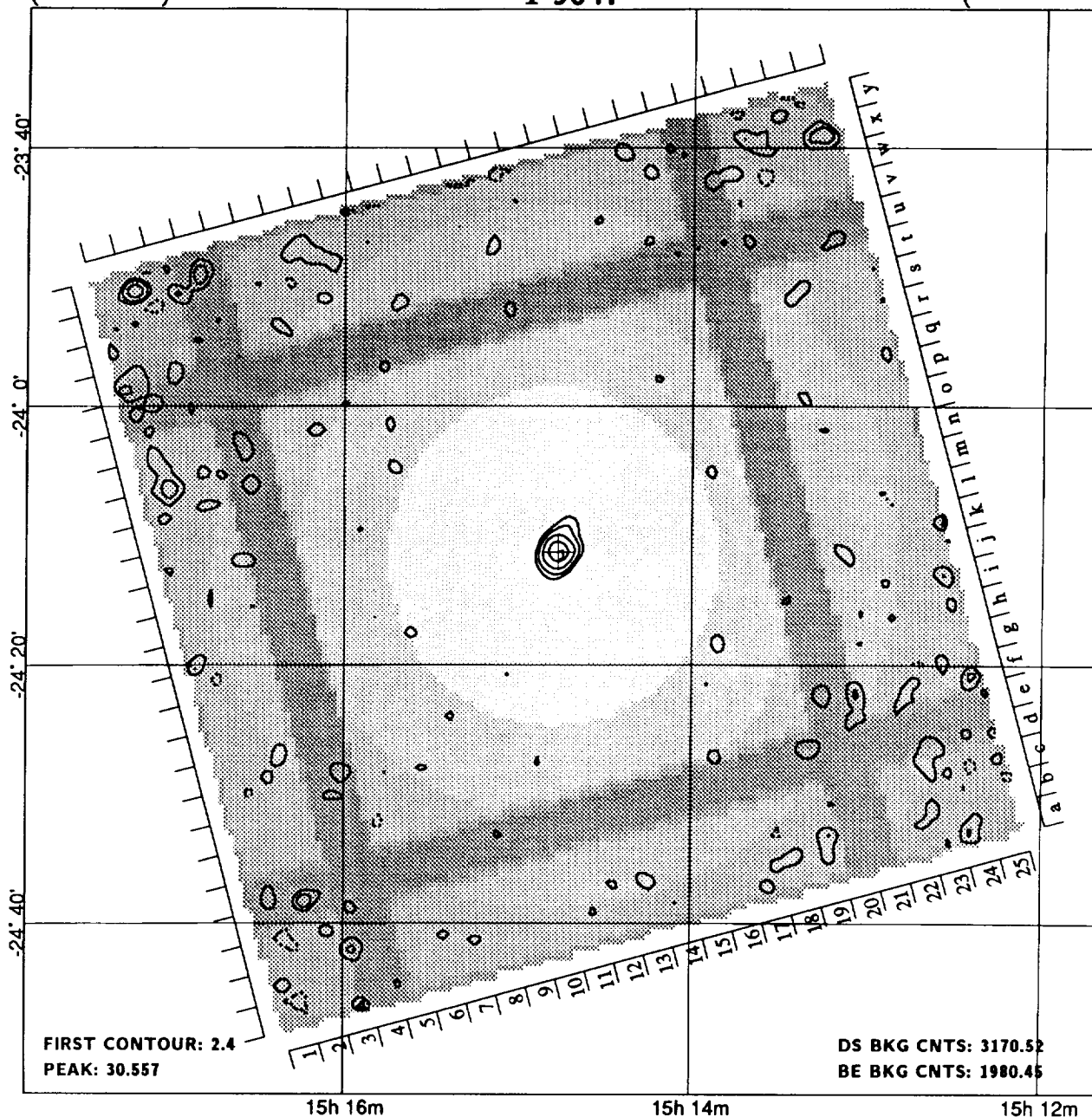
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3408	1L	15 14 46.7	-24 11 19	31	0.0531	0.0068	93.3	16.7	7.6	1.1	0	0.4	A	BL



(15h 14m)

I 9647

(15h 14m)



# PKS 1514-242A, TEMPORAL STUDY OF FLUXES AND SPECTRA OF BL LAC OBJECTS

FIELD CENTER:  $15^{\text{h}}14^{\text{m}}45.0^{\text{s}}$   $-24^{\circ}11'19''$  (B1950)  
 $15^{\text{h}}17^{\text{m}}41.5^{\text{s}}$   $-24^{\circ}22'16''$  (J2000)  
 $\ell$ : 340.68  $b$ : 27.58

DATE: 1981/ 39 - 1981/ 39  
 LIVETIME: 2569.2s  
 ROLL ANGLE: -105.0°

NH: 8.8E+20  
 REF/ID:  
 FIELD FLAGS: CL

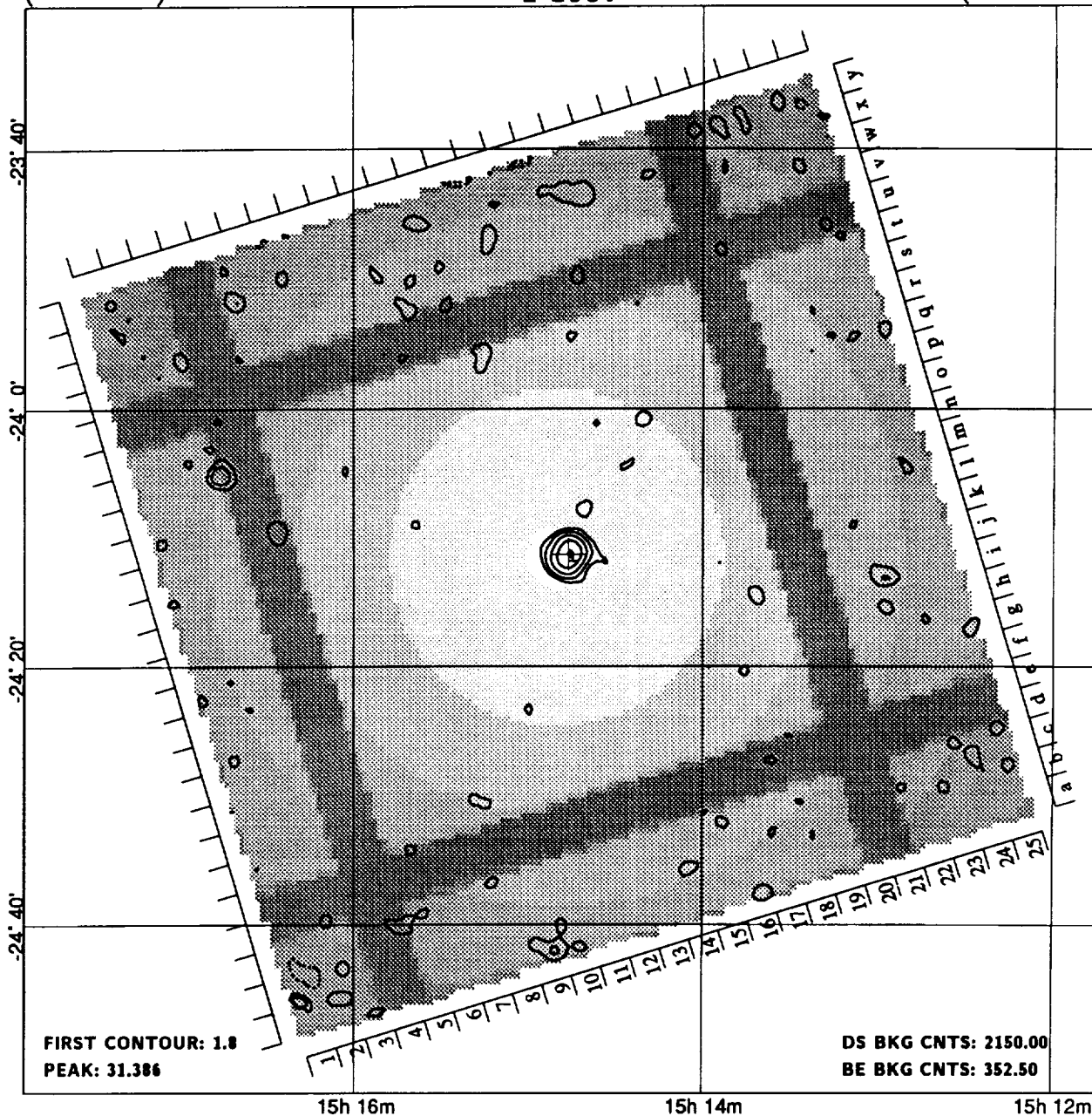
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3408	1L	15 14 46.0	-24 11 16	31	0.0588	0.0067	112.6	16.4	8.6	1.0	0	0.3	A	BL



(15h 14m)

I 1997

(15h 14m)



## X-RAY STUDY OF BL LAC OBJECTS: AP LIBRA

FIELD CENTER:  $15^{\text{h}}14^{\text{m}}48.0^{\text{s}}$   $-24^{\circ}10'59''$  (B1950)  
 $15^{\text{h}}17^{\text{m}}44.5^{\text{s}}$   $-24^{\circ}21'56''$  (J2000)  
 $l: 340.69$   $b: 27.58$

DATE: 1979/ 57 - 1979/ 57  
 LIVETIME: 1742.2s  
 ROLL ANGLE:  $-106.8^{\circ}$

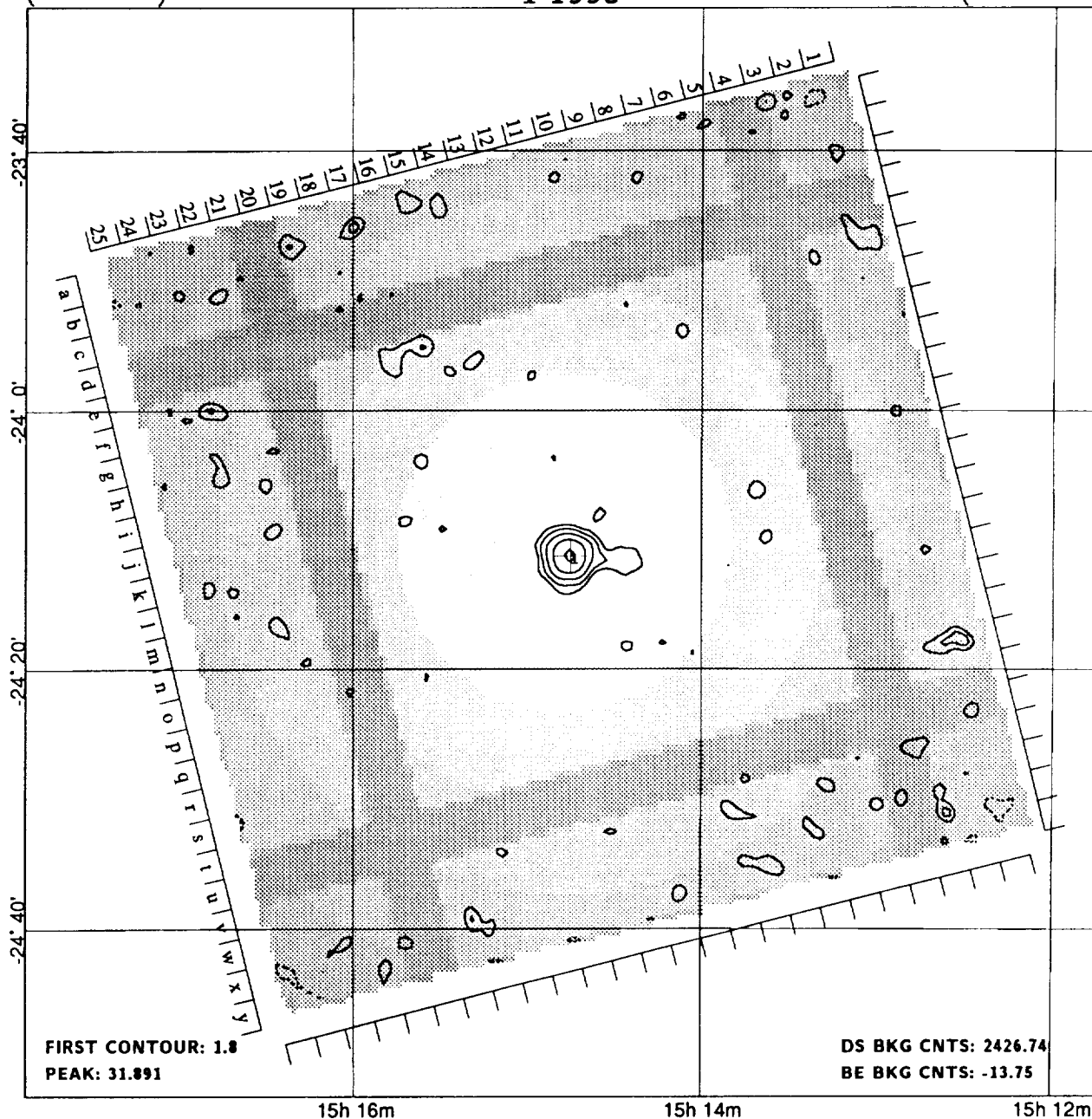
NH:  $8.8\text{E}+20$   
 REF/ID: 1  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3408	1	15 14 46.1	-24 11 20	31	0.0856	0.0084	111.0	7.0	10.2	1.0	0	0.4	AH	BL

(15h 14m)

I 1998

(15h 14m)



## X-RAY STUDY OF BL LAC OBJECTS: AP LIBRA

FIELD CENTER:  $15^h 14^m 48.0^s$   $-24^\circ 10' 59''$  (B1950)  
 $15^h 17^m 44.5^s$   $-24^\circ 21' 56''$  (J2000)  
 $l: 340.69$   $b: 27.58$

DATE: 1979/215 - 1979/215  
 LIVETIME: 1966.5s  
 ROLL ANGLE:  $75.9^\circ$

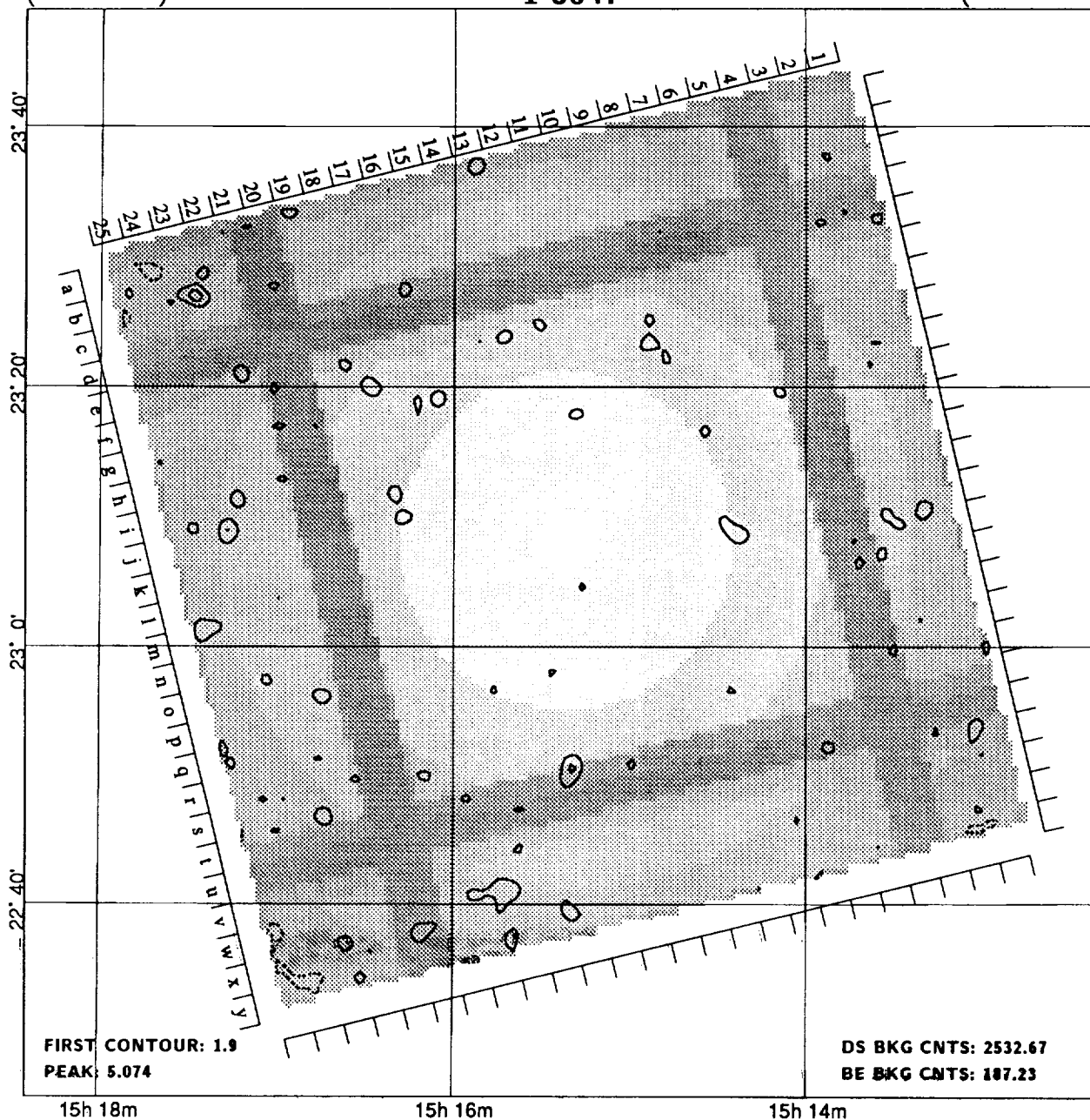
NH:  $8.8E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3408	1	15 14 45.1	-24 11 17	31	0.0955	0.0082	139.5	5.5	11.6	1.4	0	0.8	AH	BL

(15h 15m)

I 8047

(15h 15m)



**LB9576, OPTICALLY SELECTED RADIO-QUIET QSOs W/ CONT. SPECTRUM**

FIELD CENTER:  $15^h 15^m 22.6^s$   $23^\circ 07' 10''$  (B1950)  
 $15^h 17^m 34.9^s$   $22^\circ 56' 14''$  (J2000)  
 $l$ : 33.92  $b$ : 56.75

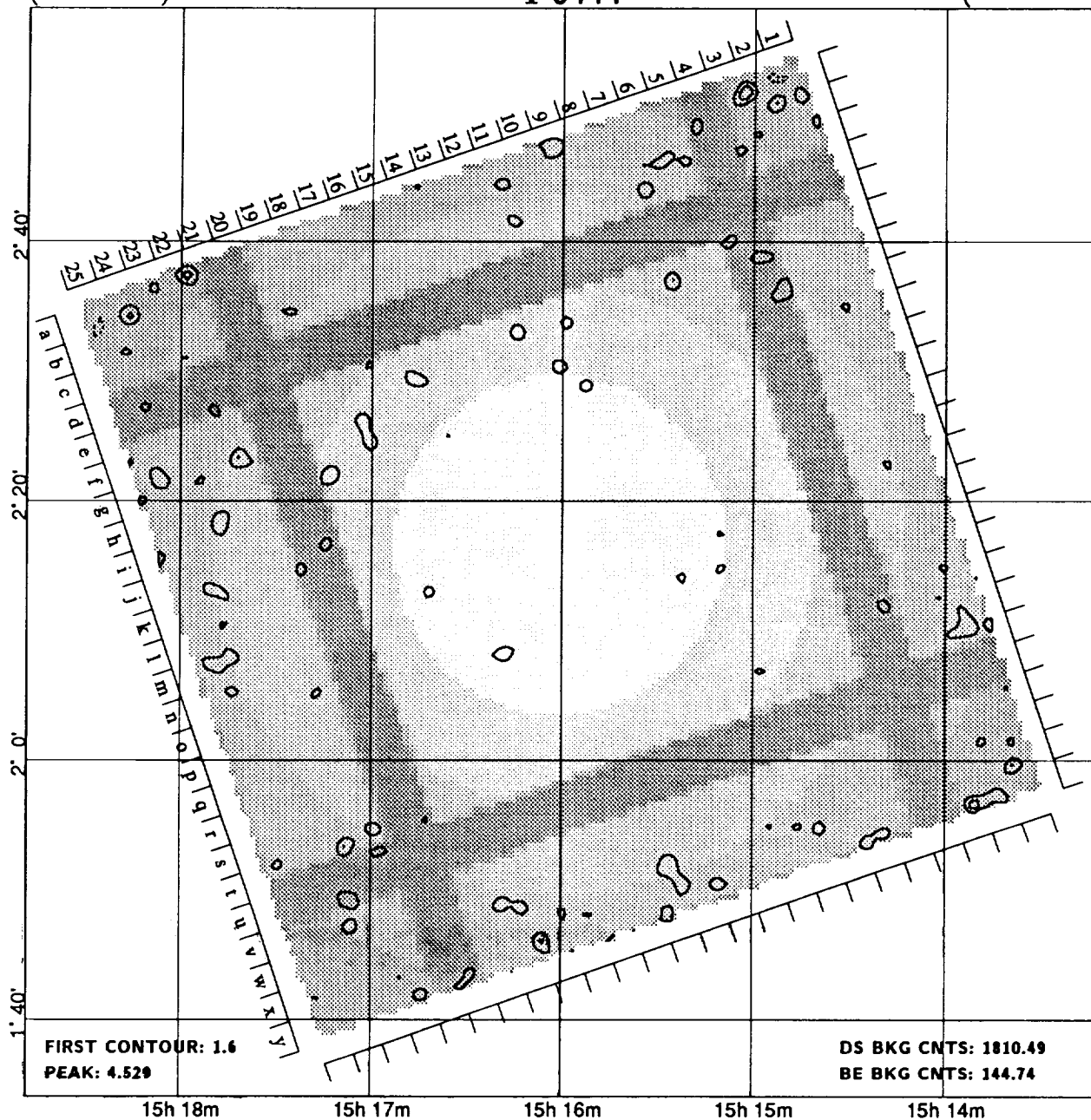
DATE: 1980/228 - 1980/228  
 LIVETIME: 2052.3s  
 ROLL ANGLE:  $76.2^\circ$

NH:  $3.9E+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 16m)

I 6444

(15h 16m)

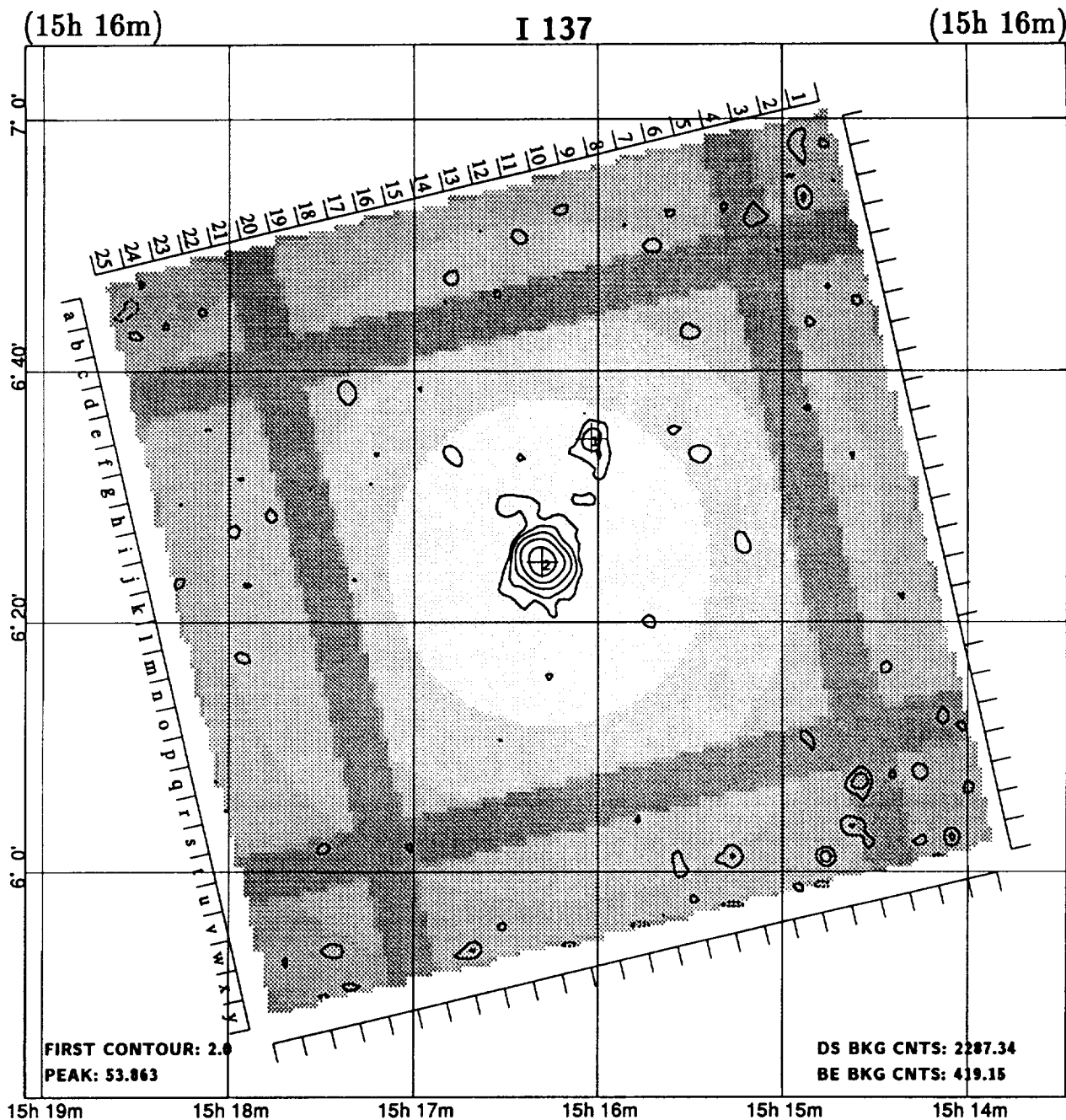


## NGC 5904, GLOBULAR CLUSTER SURVEY

FIELD CENTER:  $15^{\text{h}}16^{\text{m}}00.0^{\text{s}}$   $02^{\circ}15'59''$  (B1950)  
 $15^{\text{h}}16^{\text{m}}31.8^{\text{s}}$   $02^{\circ}05'06''$  (J2000)  
 $l: 3.86$   $b: 46.80$

DATE: 1980/213 - 1980/213  
 LIVETIME: 1467.1s  
 ROLL ANGLE:  $71.2^{\circ}$

NH:  $3.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



**A2055 CLUSTER SURFACE BRIGHTNESS**

FIELD CENTER:  $15^{\text{h}}16^{\text{m}}16.8^{\text{s}}$   $06^{\circ}23'59''$  (B1950)  
 $15^{\text{h}}16^{\text{m}}44.9^{\text{s}}$   $06^{\circ}13'07''$  (J2000)  
 $l: 8.84$   $b: 49.25$

DATE: 1979/228 - 1979/228  
 LIVETIME: 1853.5s  
 ROLL ANGLE:  $76.9^{\circ}$

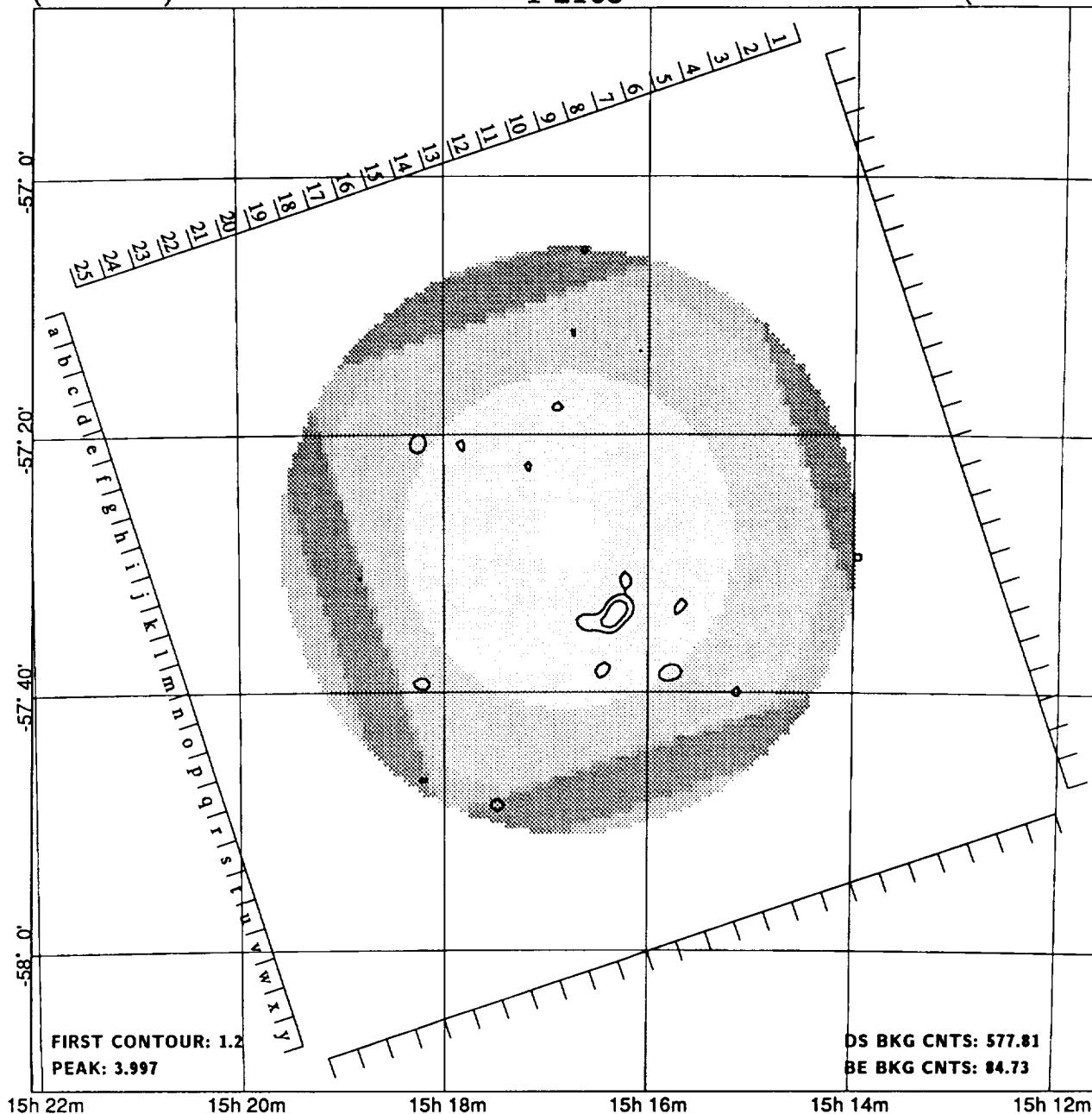
NH:  $3.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3410	1	15 16 02.3	06 34 37	43	0.0144	0.0040	17.6	6.4	3.6	1.1	0	11.1	H	
3412	2	15 16 18.3	06 24 47	31	0.179	0.012	246.5	7.5	15.5	1.6	0	0.8	H	

(15h 16m)

I 2165

(15h 16m)



## X-RAY STUDY OF SUPERNOVA REMNANTS: G321.9-0.3

FIELD CENTER:  $15^h 16^m 48.0^s$   $-57^\circ 28' 59''$  (B1950)  
 $15^h 20^m 41.9^s$   $-57^\circ 39' 48''$  (J2000)  
 $l: 321.85$   $b: -0.38$

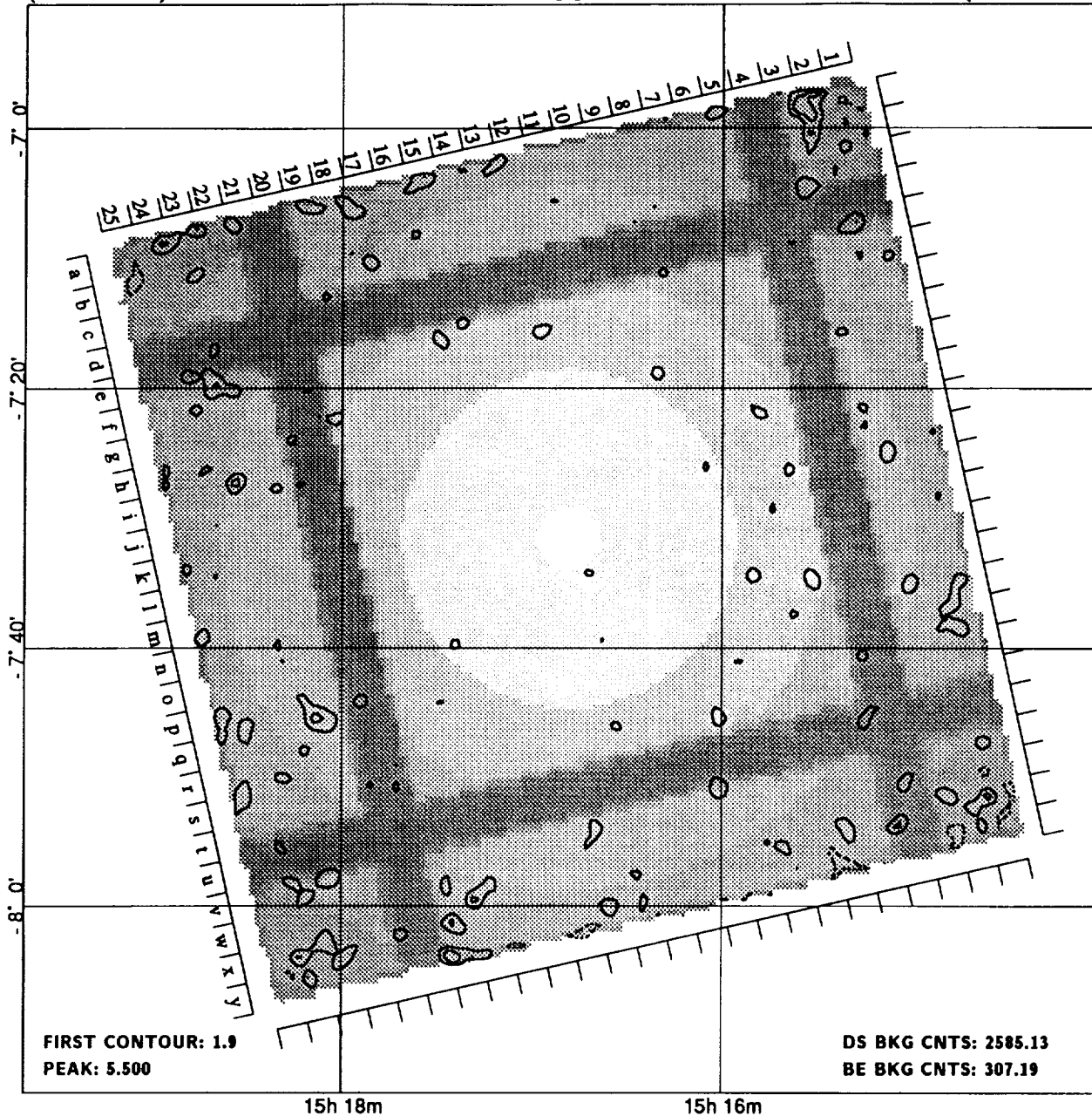
DATE: 1979/238 - 1979/238  
 LIVETIME: 468.2s  
 ROLL ANGLE:  $71.6^\circ$

NH:  $1.6E+21$   
 REF/ID:  
 FIELD FLAGS:

(15h 16m)

I 5571

(15h 16m)



FIELD CENTER:  $15^h 16^m 50.0^s$   $-07^\circ 32' 23''$  (B1950)  
 $15^h 19^m 30.6^s$   $-07^\circ 43' 14''$  (J2000)  
 $l: 354.09$   $b: 40.01$

DATE: 1980/239 - 1980/239  
LIVETIME: 2094.8s  
ROLL ANGLE:  $77.3^\circ$

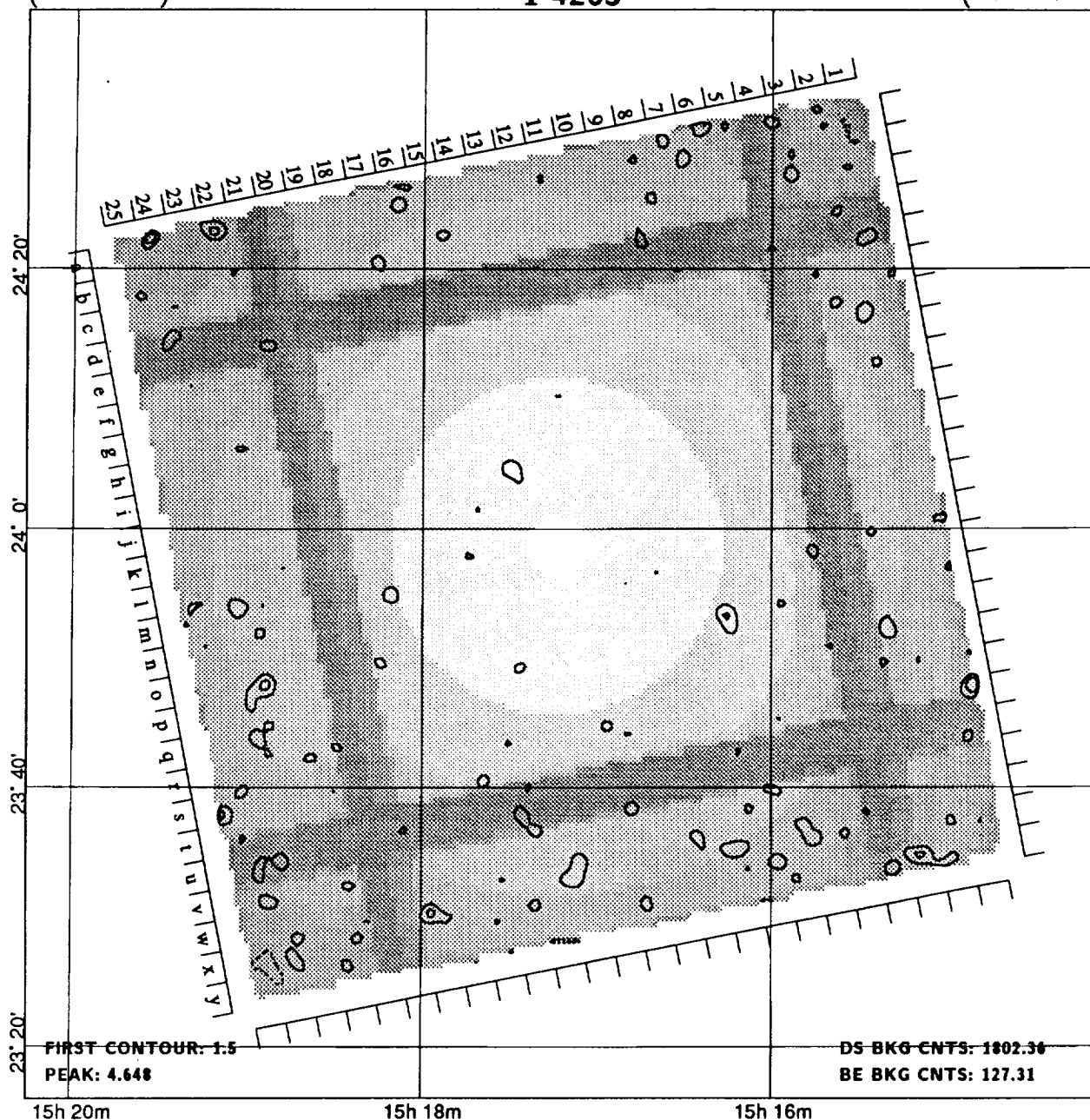
NH:  $6.8E+20$   
REF/ID:  
FIELD FLAGS:



(15h 17m)

I 4263

(15h 17m)



FIELD CENTER:  $15^{\text{h}}17^{\text{m}}12.0^{\text{s}}$   $23^{\circ}57'59''$  (B1950)  
 $15^{\text{h}}19^{\text{m}}23.2^{\text{s}}$   $23^{\circ}47'10''$  (J2000)  
 $l: 35.60$   $b: 56.56$

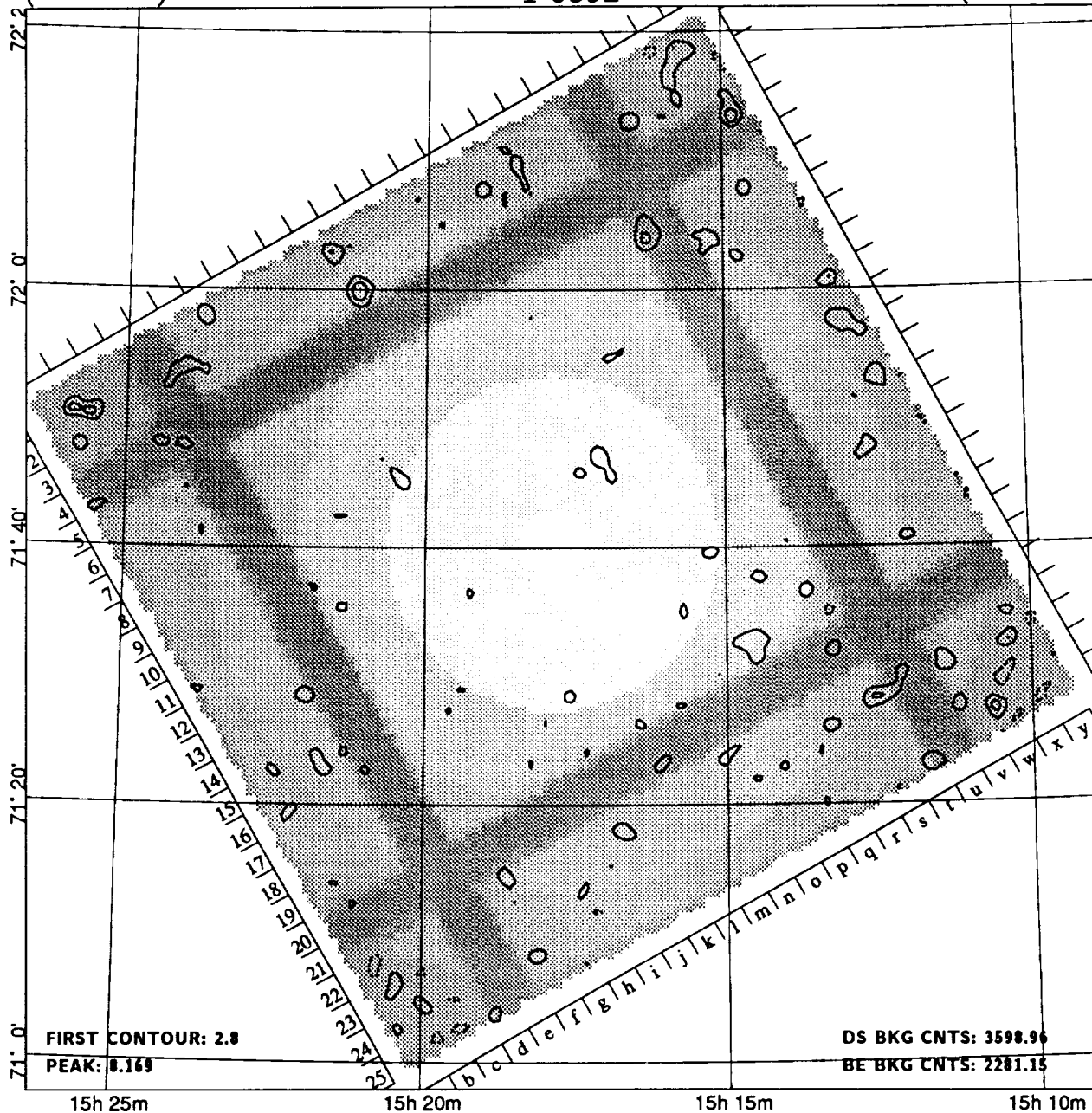
DATE: 1980/227 - 1980/227  
 LIVETIME: 1460.5s  
 ROLL ANGLE:  $78.9^{\circ}$

NH:  $3.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 17m)

I 6892

(15h 17m)



A2068, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER: 15<sup>h</sup>17<sup>m</sup>42.0<sup>s</sup> 71°39'59" (B1950)  
 15<sup>h</sup>17<sup>m</sup>43.4<sup>s</sup> 71°29'07" (J2000)  
 $l$ : 108.36  $b$ : 41.25

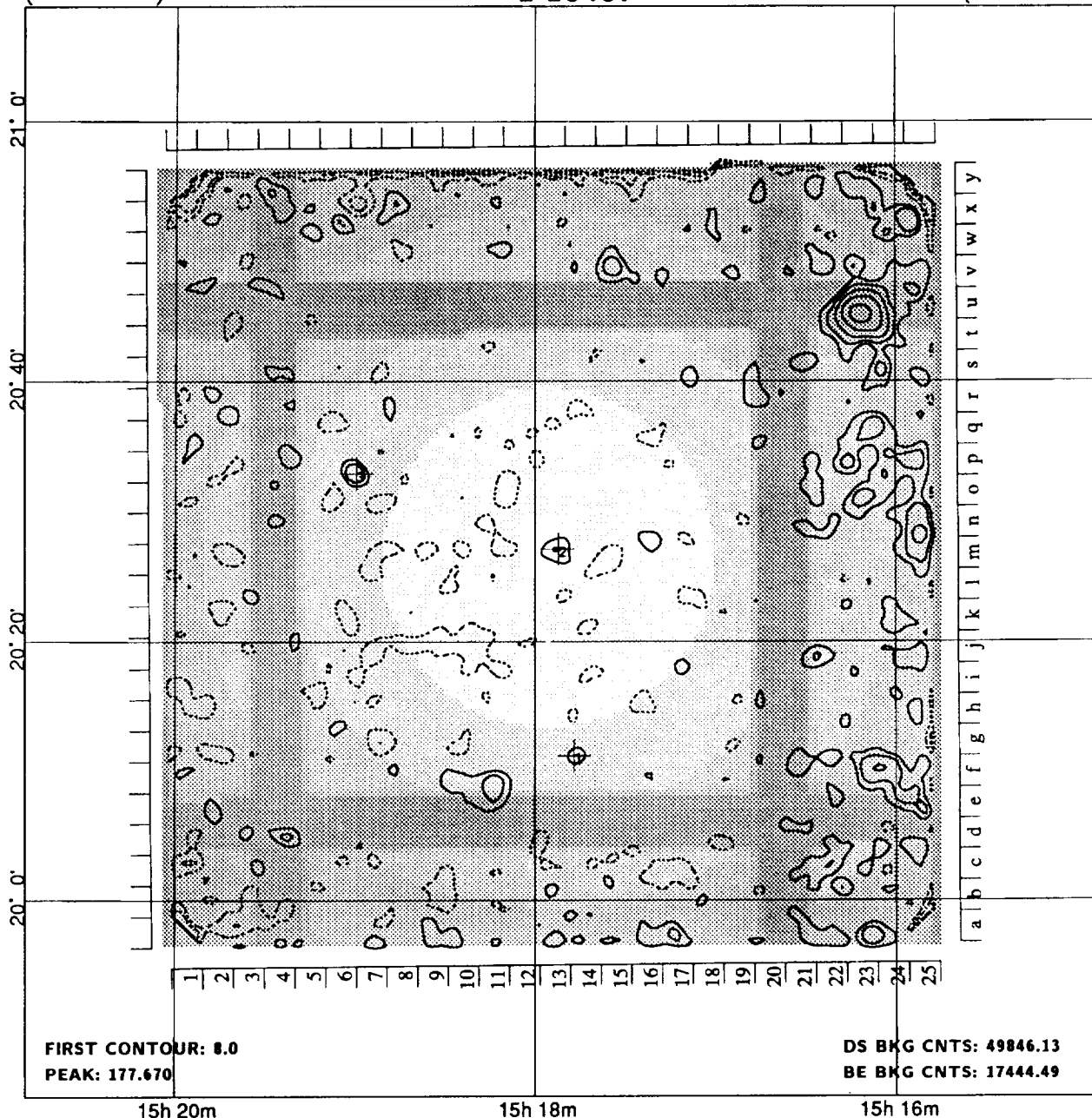
DATE: 1980/102 - 1980/102  
 LIVETIME: 3021.1s  
 ROLL ANGLE: -29.5°

NH: 2.2E+20  
 REF/ID: CLG  
 FIELD FLAGS:

(15h 17m)

I 10407

(15h 17m)



## 3C 318: DISTANT CLUSTER (Pat Henry)

FIELD CENTER:  $15^h 17^m 51.0^s$   $20^\circ 26' 52''$  (B1950)  
 $15^h 20^m 05.8^s$   $20^\circ 16' 05''$  (J2000)  
 $l: 29.64$   $b: 55.41$

DATE: 1981/ 59 - 1981/ 59  
 LIVETIME: 40391.7s  
 ROLL ANGLE:  $-90.4^\circ$

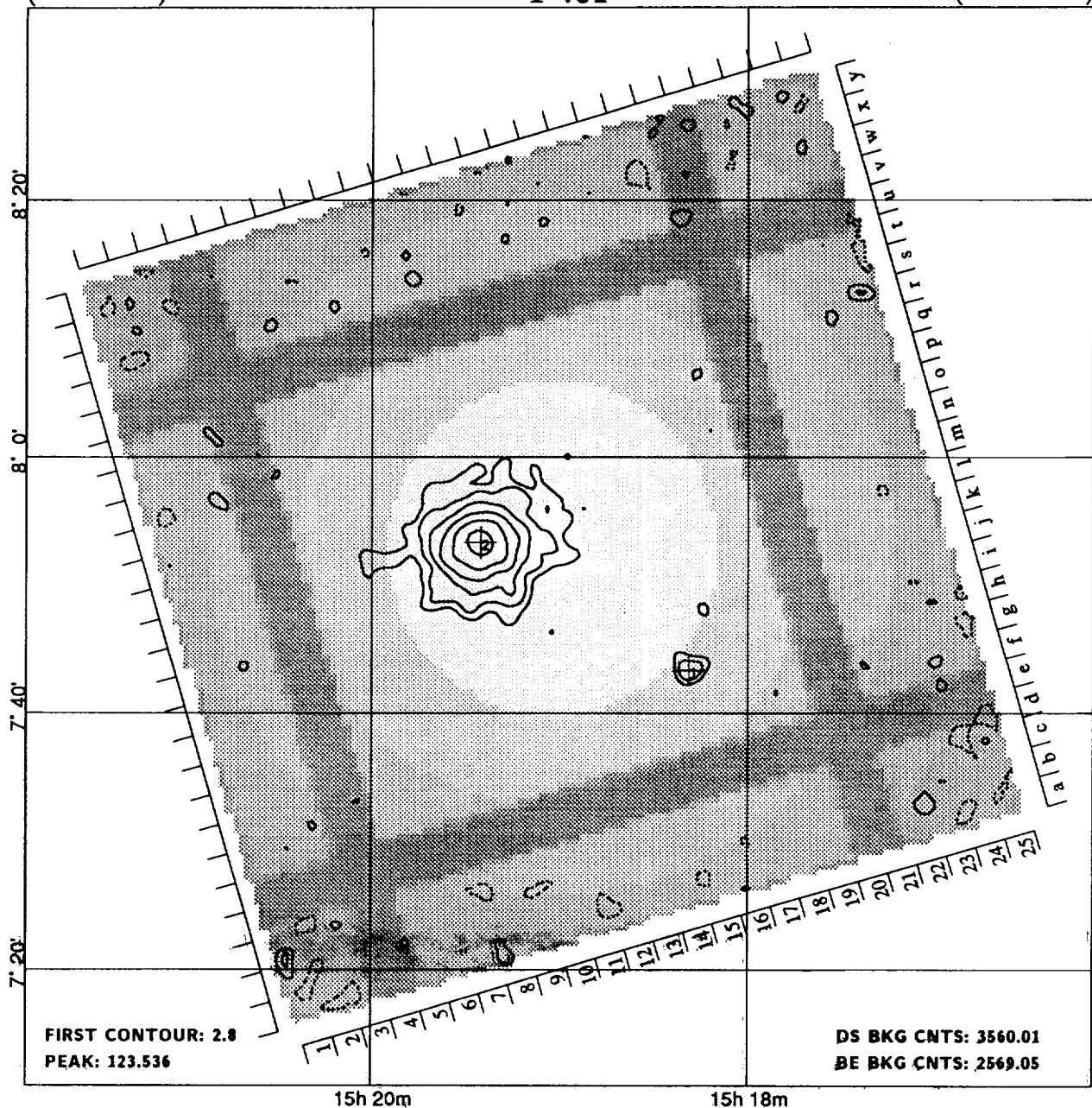
NH:  $4.0E+20$   
 REF/ID:  
 FIELD FLAGS: LS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3414	1L	15 17 46.9	20 11 09	54	0.00304	0.00071	71.9	107.1	4.2	0.5	0	15.7		
3415	2L	15 17 52.2	20 27 06	35	0.00344	0.00066	103.2	149.8	5.1	0.6	0	0.4		CLG
3417	3L	15 18 59.7	20 32 56	50	0.00462	0.00074	105.8	87.2	6.1	0.7	0	17.2		

(15h 19m)

I 461

(15h 19m)



## NGC 5919/29/31 ABNORMAL GALAXIES SURVEY

FIELD CENTER:  $15^h 19^m 00.0^s$   $07^\circ 52' 59''$  (B1950)  
 $15^h 21^m 26.7^s$   $07^\circ 42' 16''$  (J2000)  
 $l: 11.31$   $b: 49.54$

DATE: 1979/ 36 - 1979/ 36  
 LIVETIME: 2884.8s  
 ROLL ANGLE:  $-106.3^\circ$

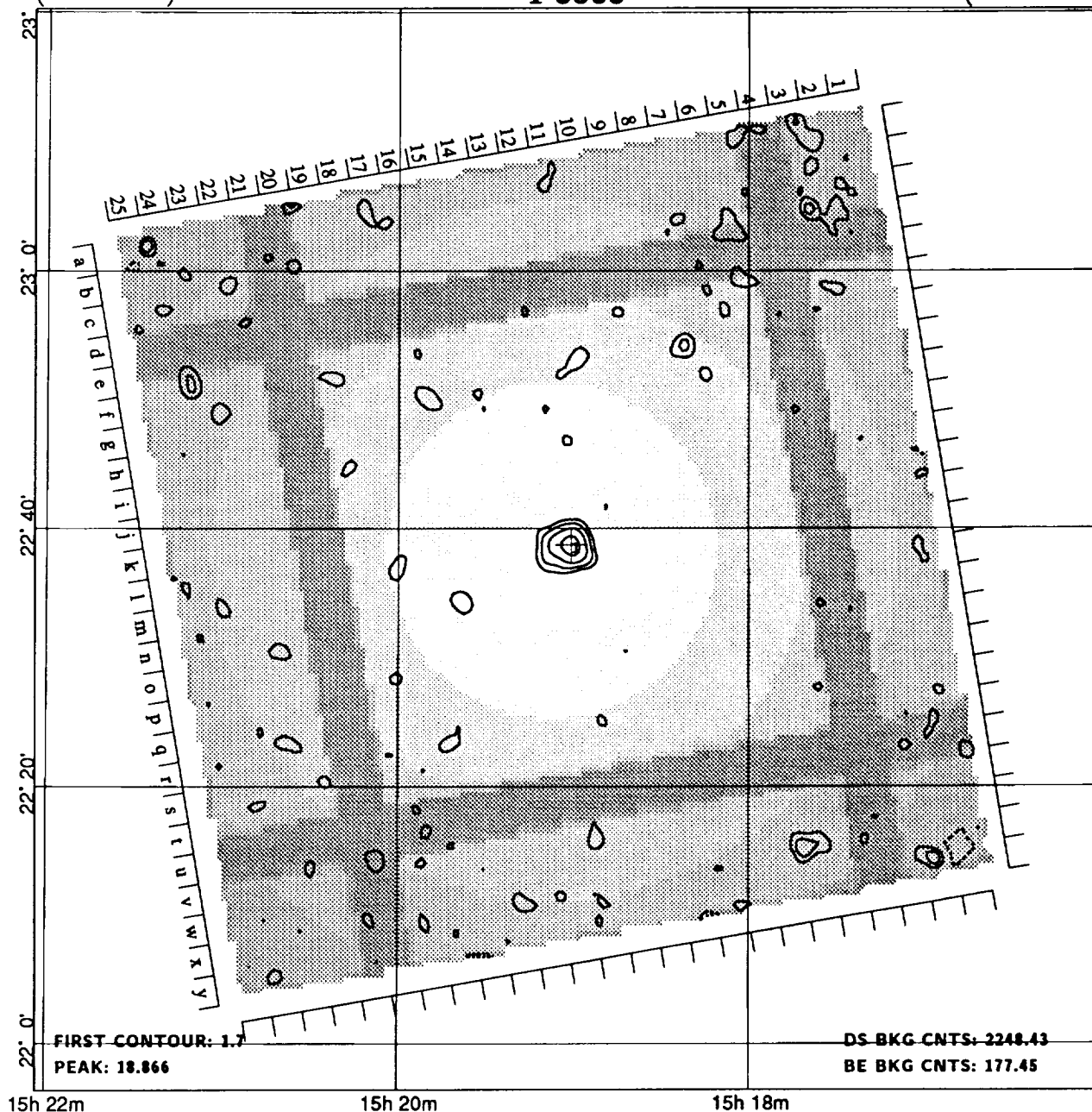
NH:  $2.9E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3416	1L	15 18 18.7	07 43 19	42	0.0216	0.0045	37.5	8.5	4.7	0.8	0	14.1		
3419	2L	15 19 25.3	07 53 24	37	0.147	0.014	300.1	272.9	10.1	2.8	0	6.3	A	CLG

(15h 19m)

I 5383

(15h 19m)



## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $15^{\text{h}}19^{\text{m}}02.1^{\text{s}}$   $22^{\circ}38'21''$  (B1950)  
 $15^{\text{h}}21^{\text{m}}14.6^{\text{s}}$   $22^{\circ}27'38''$  (J2000)  
 $l: 33.49$   $b: 55.81$

DATE: 1980/225 - 1980/225  
 LIVETIME: 1822.0s  
 ROLL ANGLE:  $80.3^{\circ}$

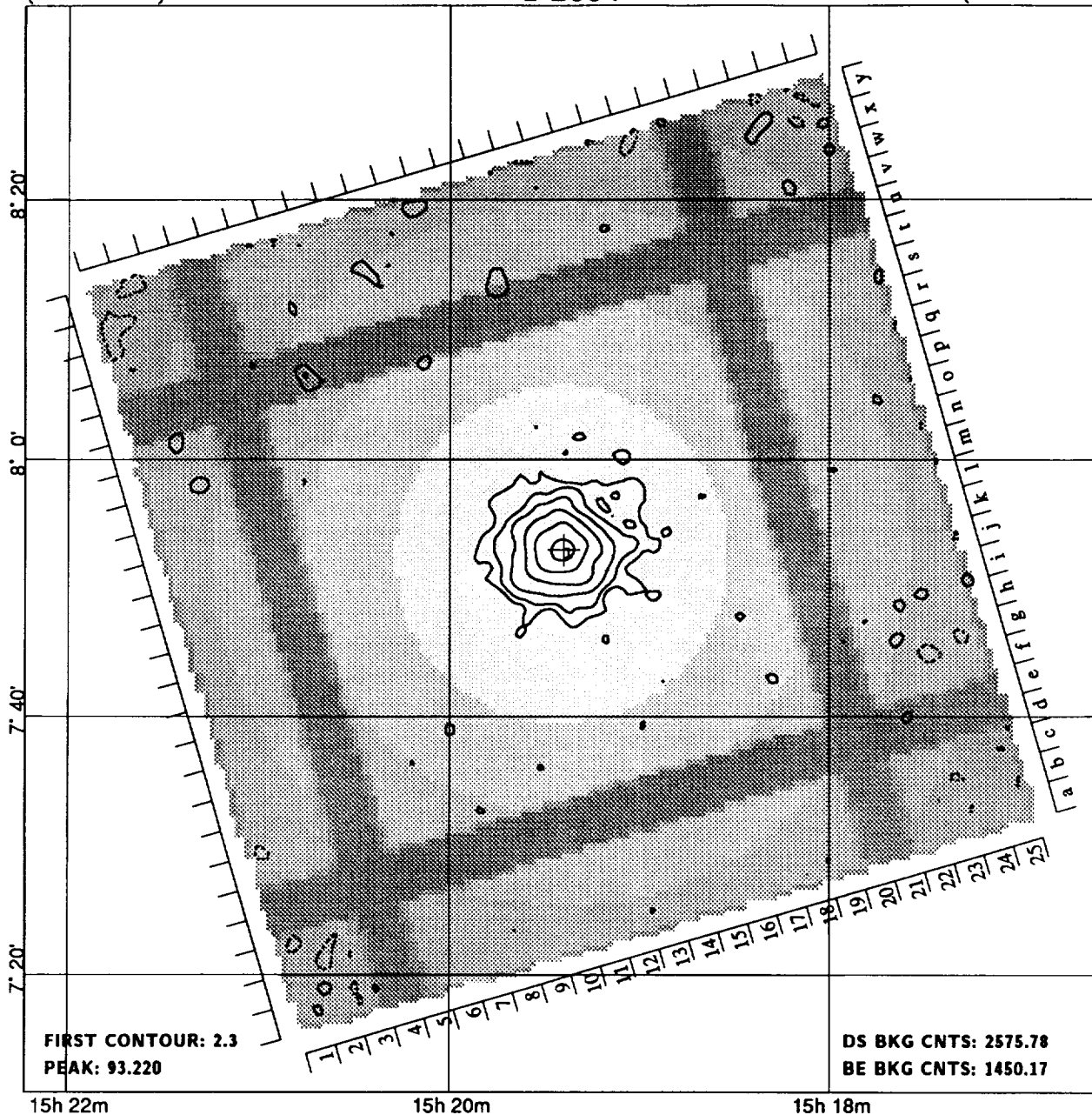
NH:  $4.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3418	1	15 19 00.6	22 38 43	32	0.0535	0.0065	72.2	5.8	8.2	1.2	0	0.2	H	Q

(15h 19m)

I 2604

(15h 19m)



## MKW 35: CD GALAXIES IN POOR CLUSTERS

FIELD CENTER:  $15^{\text{h}}19^{\text{m}}24.0^{\text{s}}$   $07^{\circ}52'59''$  (B1950)

DATE: 1979/ 36 - 1979/ 36

NH:  $2.9\text{E}+20$  $15^{\text{h}}21^{\text{m}}50.7^{\text{s}}$   $07^{\circ}42'17''$  (J2000)

LIVETIME: 2087.2s

REF/ID:

 $l$ : 11.39  $b$ : 49.45ROLL ANGLE:  $-106.3^{\circ}$ 

FIELD FLAGS: L

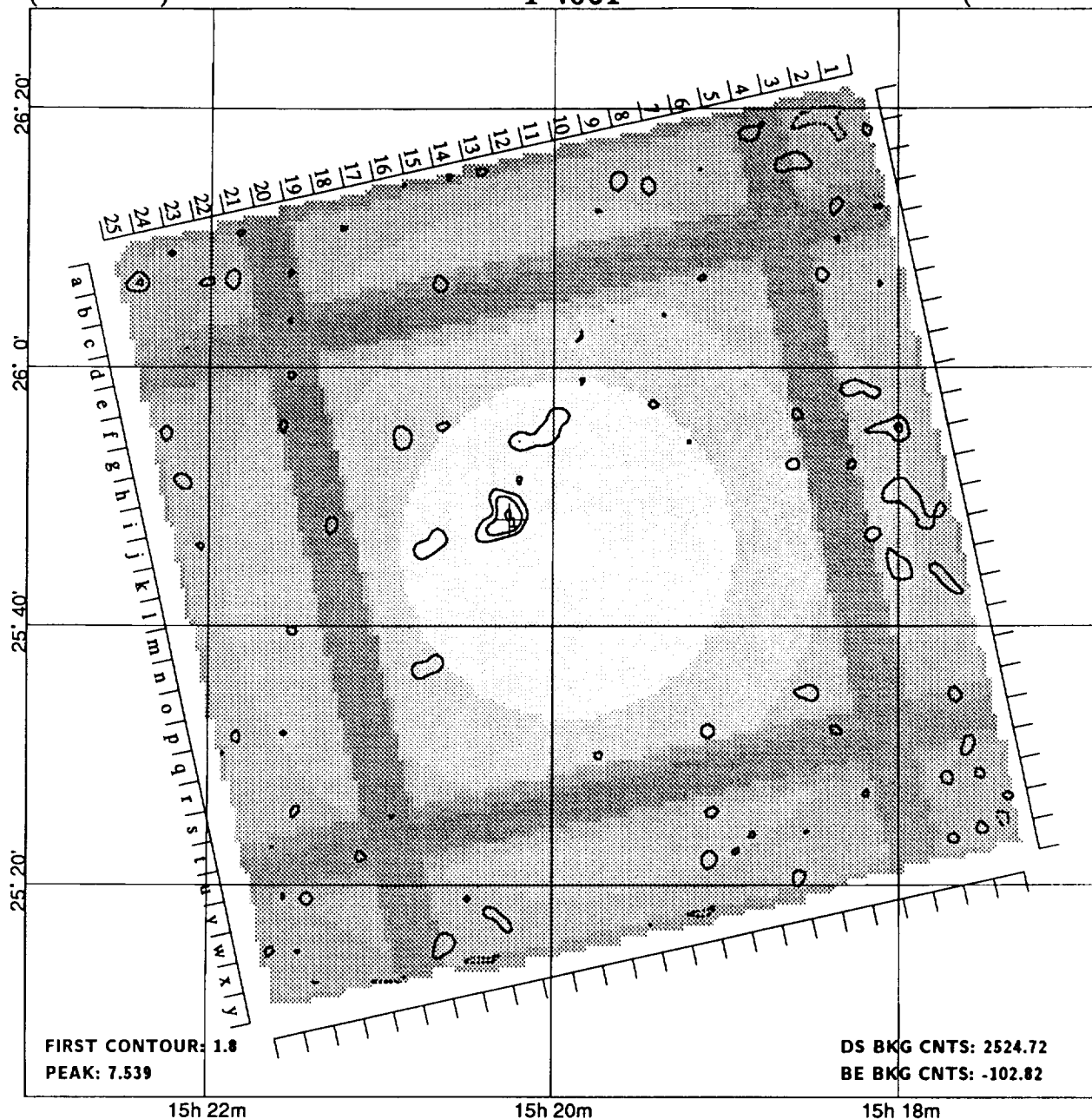
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3419	1L	15 19 24.0	07 52 59	31	0.160	0.017	249.7	210.3	9.4	3.0	0	0.2	A	CLG



(15h 19m)

I 4061

(15h 19m)



## LB 9657, RADIO QUIET QUASAR WITH CONTINUOUS SPECTRUM

FIELD CENTER: 15<sup>h</sup>19<sup>m</sup>56.6<sup>s</sup> 25°45'41" (B1950)15<sup>h</sup>22<sup>m</sup>05.6<sup>s</sup> 25°35'01" (J2000)

l: 39.02 b: 56.34

DATE: 1979/225 - 1979/225

LIVETIME: 2045.8s

ROLL ANGLE: 77.6°

NH: 3.8E+20

REF/ID:

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3425	1	15 20 15.3	25 48 16	42	0.0179	0.0039	26.2	5.8	4.6	1.1	0	5.1	H	



(15h 20m)



**NH: 6.9E+20**

**REF/ID:**

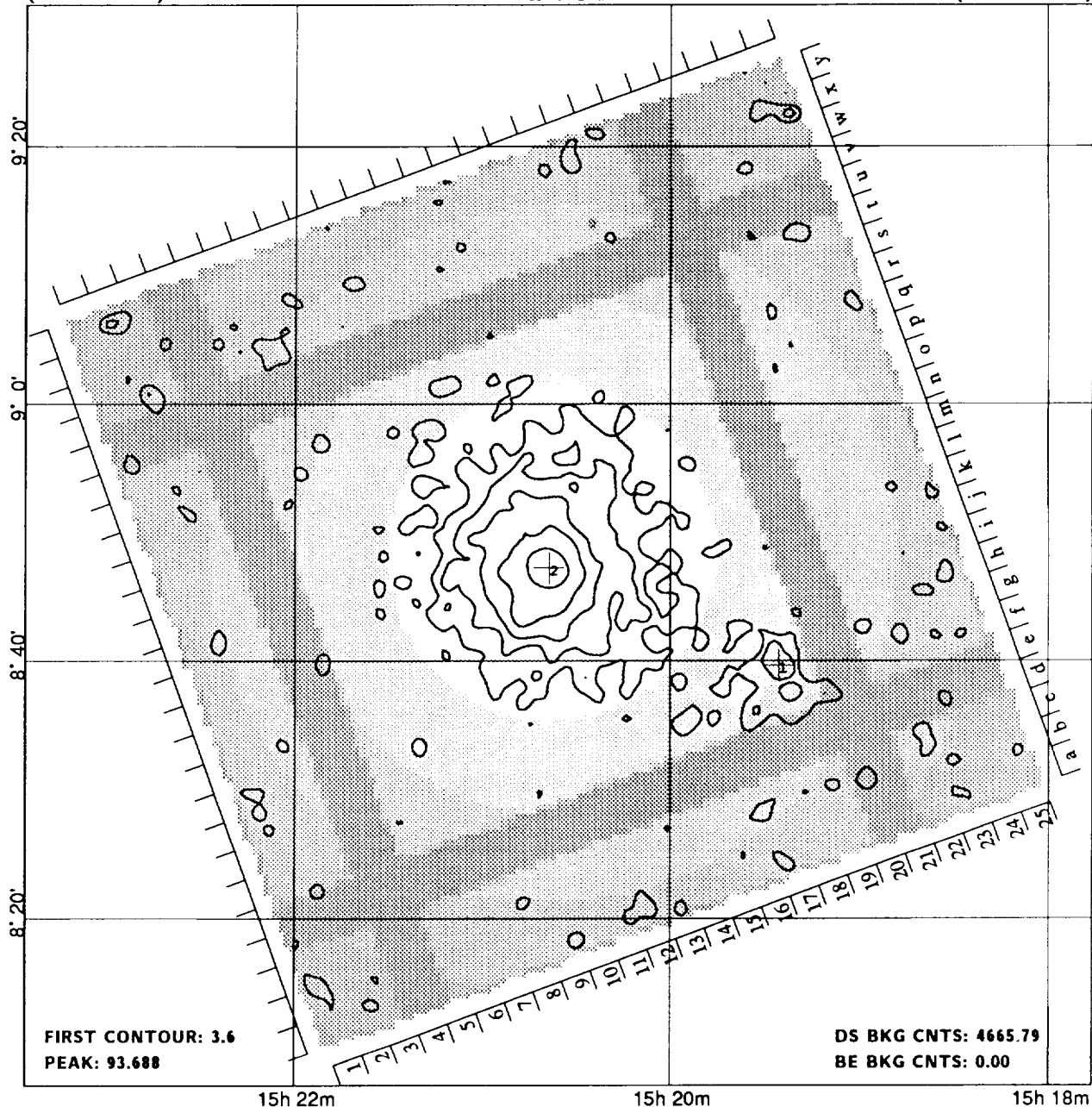
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3422	1	15 19 49.9	-06 33 57	50	0.0669	0.0095	52.7	3.3	7.0	1.3	200	24.5	H	Q
3429	2	15 20 46.8	-06 25 55	50	0.0333	0.0062	32.7	4.3	5.4	1.0	0	18.1	H	

(15h 20m)

I 162

(15h 20m)



## A2063 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $15^h 20^m 36.0^s$   $08^\circ 48' 57''$  (B1950)  
 $15^h 23^m 01.8^s$   $08^\circ 38' 19''$  (J2000)  
 $l: 12.05$   $b: 49.71$

DATE: 1979/ 36 - 1979/ 36  
 LIVETIME: 3780.8s  
 ROLL ANGLE:  $-110.0^\circ$

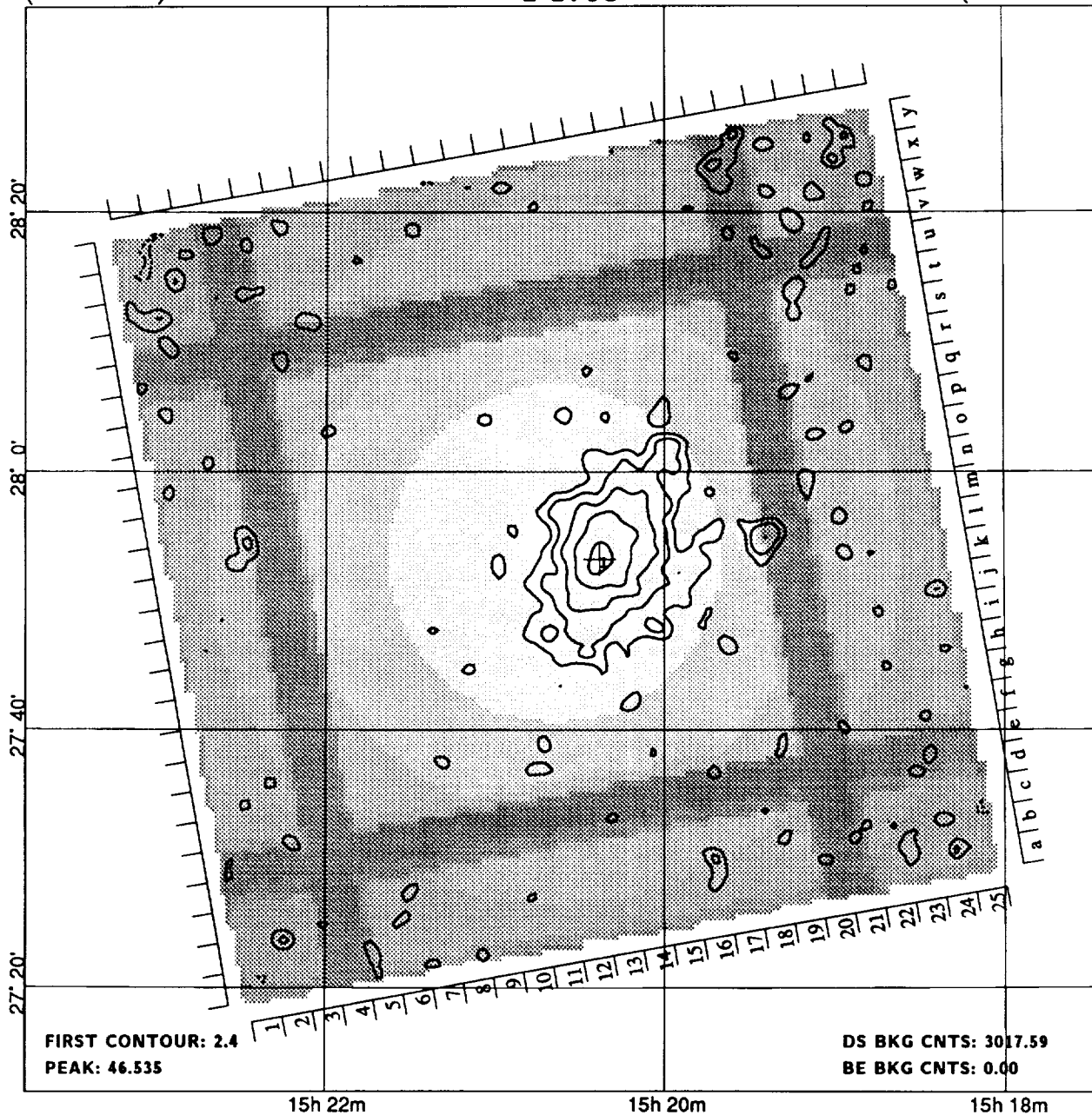
NH:  $2.9E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3421	1L	15 19 25.4	08 39 39	52	0.0174	0.0046	33.7	20.3	3.7	2.7	100	19.8	A	
3427	2L	15 20 38.6	08 47 14	31	0.0782	0.0099	219.6	278.4	7.8	7.0	0	1.9	A	CLG

(15h 20m)

I 1795

(15h 20m)



A2065: STUDY, CLUSTERS OF GALAXIES

FIELD CENTER:  $15^h 20^m 36.0^s$   $27^\circ 53' 59''$  (B1950)  
 $15^h 22^m 42.6^s$   $27^\circ 43' 21''$  (J2000)  
 $\ell$ : 42.88  $b$ : 56.56

DATE: 1979/ 30 - 1979/ 30  
LIVETIME: 2445.2s  
ROLL ANGLE: -100.1°

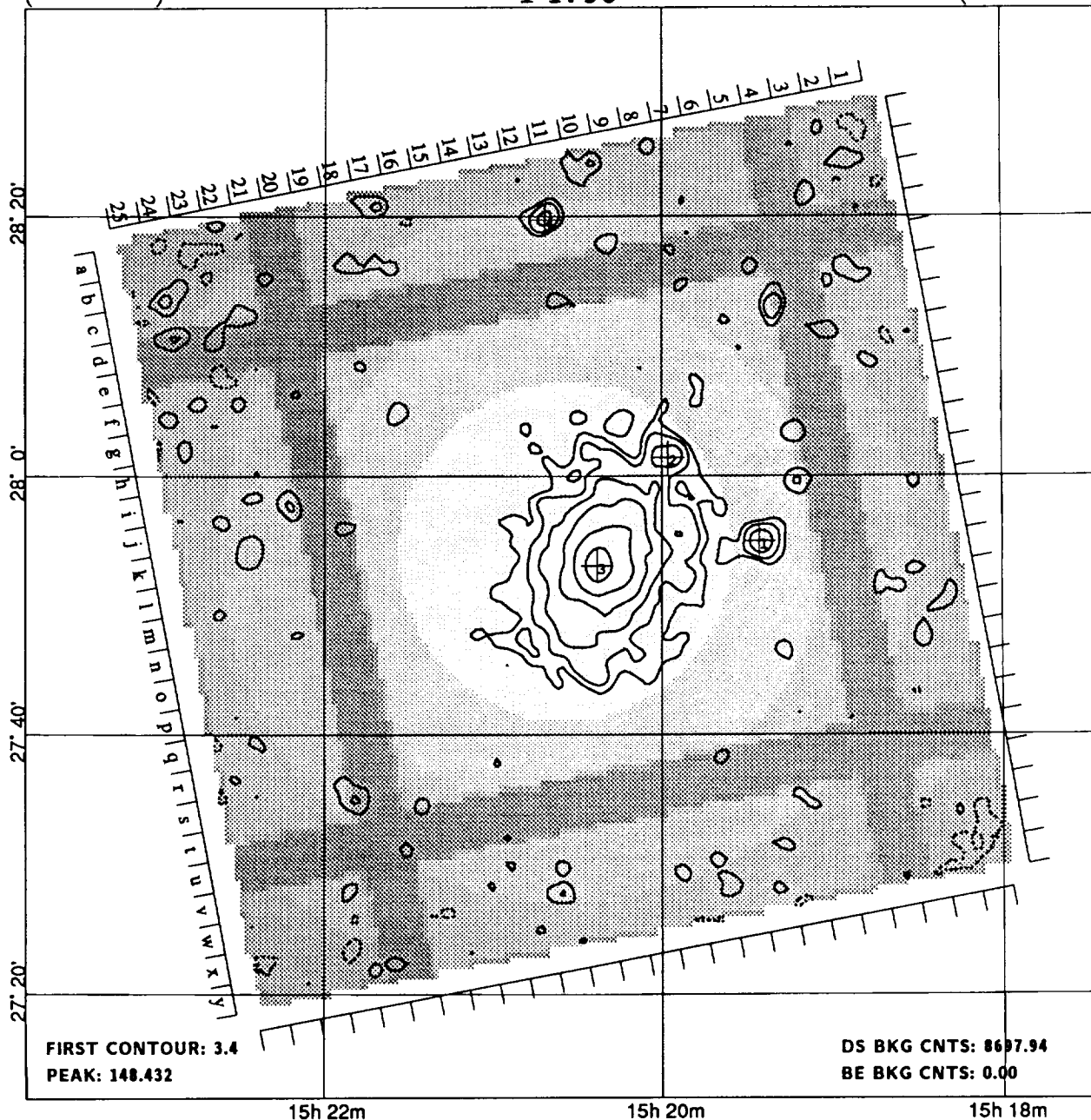
NH: 2.9E+20  
REF/ID:  
FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3426	1L	15 20 23.0	27 53 12	31	0.058	0.011	103.3	144.7	5.1	5.4	0	2.9	A	CLG

(15h 20m)

I 1796

(15h 20m)



## A2065: STUDY, CLUSTERS OF GALAXIES

FIELD CENTER: 15<sup>h</sup>20<sup>m</sup>36.0<sup>s</sup> 27°53'59" (B1950)

DATE: 1979/227 - 1979/227

NH: 2.9E+20

15<sup>h</sup>22<sup>m</sup>42.6<sup>s</sup> 27°43'21" (J2000)

LIVETIME: 7048.2s

REF/ID:

l: 42.88 b: 56.56

ROLL ANGLE: 79.3°

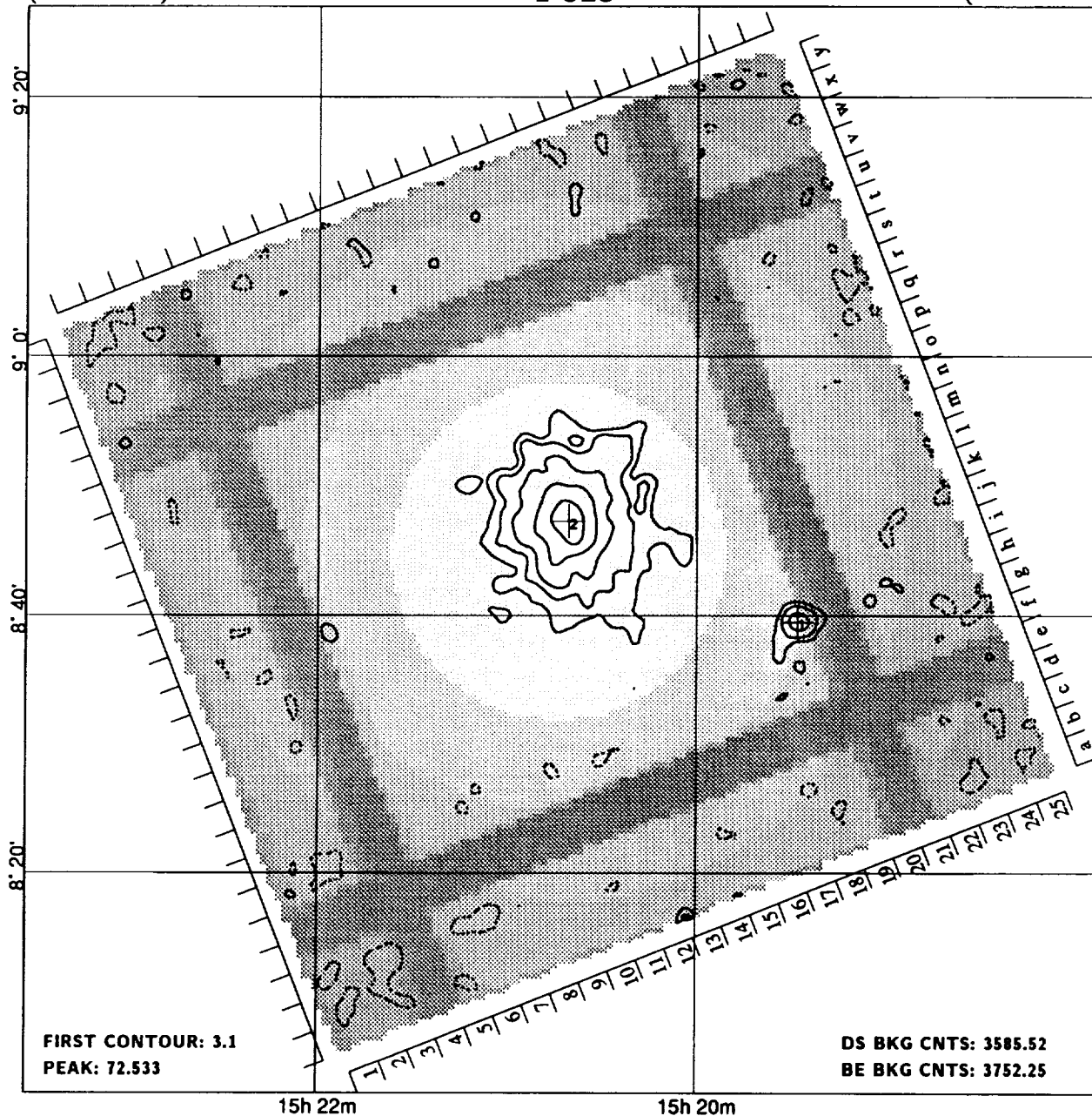
FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3420	1L	15 19 25.4	27 54 56	50	0.0181	0.0027	75.0	18.0	6.6	1.1	0	15.6		AGN
3423	2L	15 19 57.8	28 01 25	41	0.0135	0.0027	62.3	43.7	4.9	42.7	0	11.3		
3426	3L	15 20 23.0	27 53 03	31	0.0674	0.0067	347.9	415.1	10.0	5.3	0	3.0	A	CLG
3428	4L	15 20 41.6	28 19 44	51	0.0130	0.0027	38.5	9.5	4.7	0.8	0	25.7		

(15h 20m)

I 325

(15h 20m)



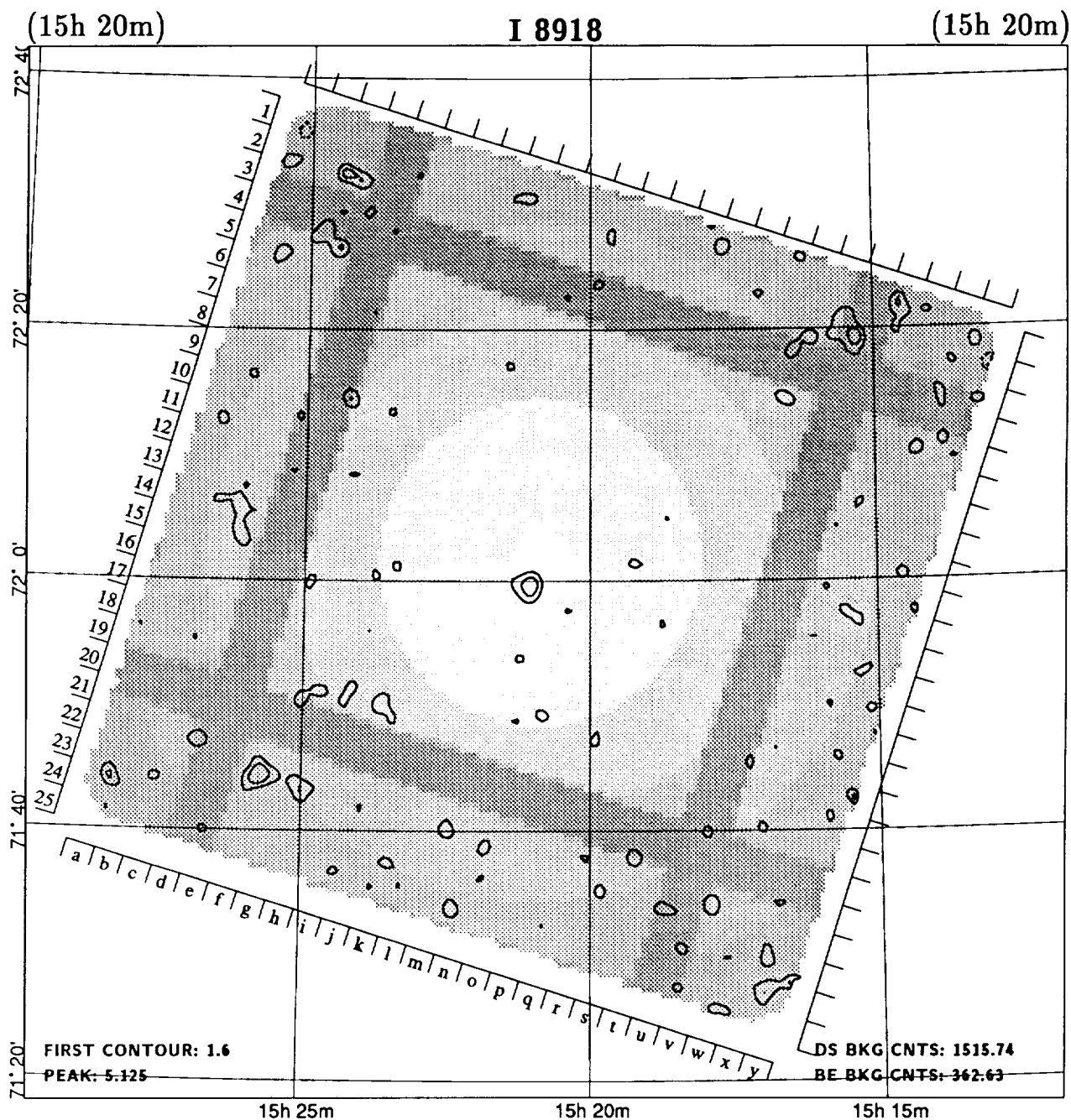
## NORMAL GALAXY GROUPS

FIELD CENTER:  $15^h 20^m 42.0^s$   $08^\circ 44' 59''$  (B1950)  
 $15^h 23^m 07.9^s$   $08^\circ 34' 22''$  (J2000)  
 $l: 12.78$   $b: 49.66$

DATE: 1979/ 24 - 1979/ 24  
 LIVETIME: 2905.5s  
 ROLL ANGLE:  $-111.4^\circ$

NH:  $2.9E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3421	1L	15 19 28.1	08 39 30	50	*0.0308	0.0079	46.5	19.5	3.7	1.1	703	19.0	A	
3427	2L	15 20 40.6	08 47 17	31	0.071	0.012	152.5	230.5	6.1	4.9	0	2.4	A	CLG



**GAMMA UMI, EMISSION FROM DELTA SCUTI STARS**

FIELD CENTER:  $15^h 20^m 47.4^s$   $72^\circ 00' 42''$  (B1950)  
 $15^h 20^m 43.9^s$   $71^\circ 50' 01''$  (J2000)  
 $l: 108.46$   $b: 40.84$

DATE: 1980/153 - 1980/153  
 LIVETIME: 1228.3s  
 ROLL ANGLE:  $17.4^\circ$

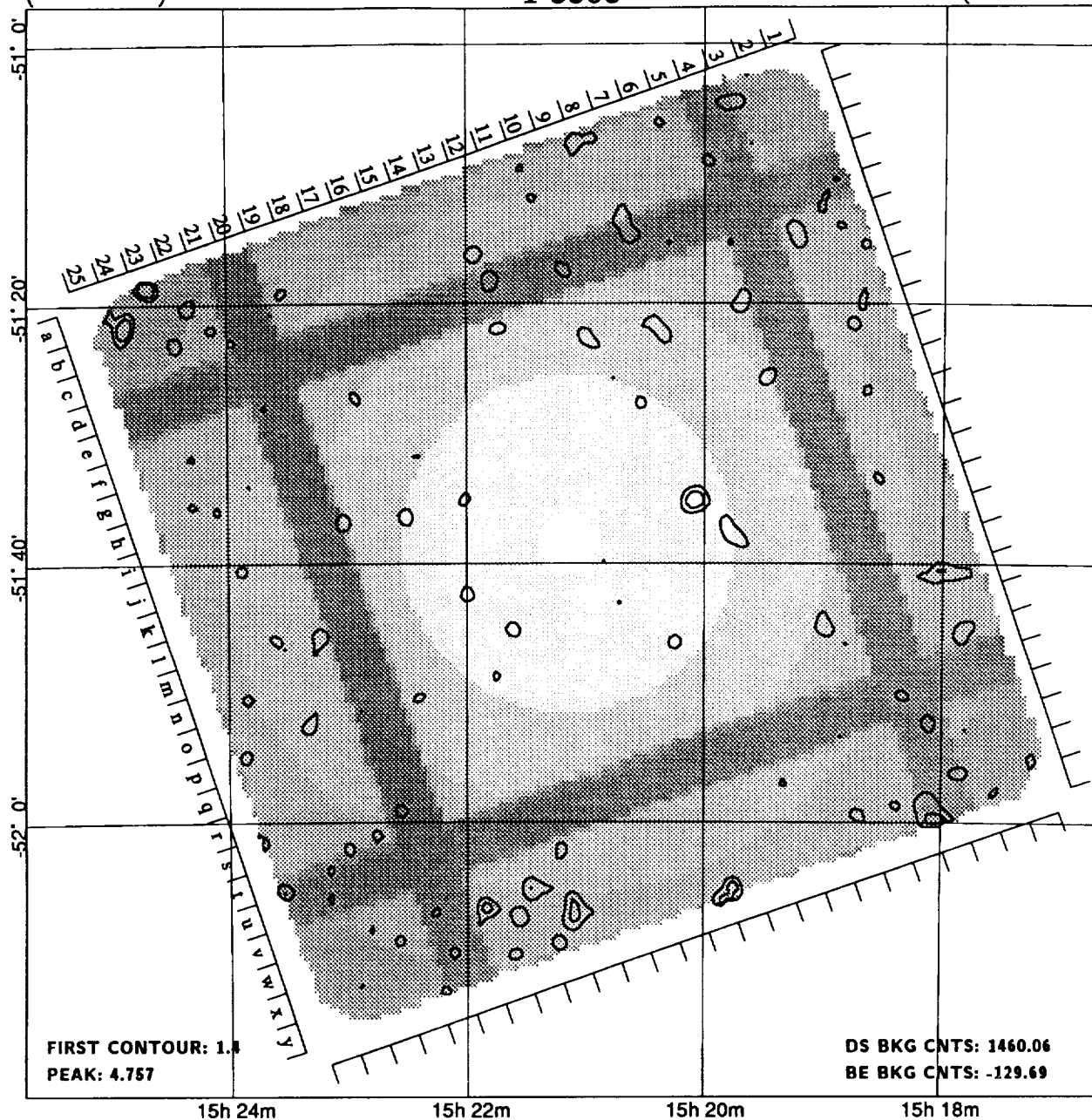
NH:  $2.2E+20$   
 REF/ID:  
 FIELD FLAGS:



(15h 21m)

I 3308

(15h 21m)

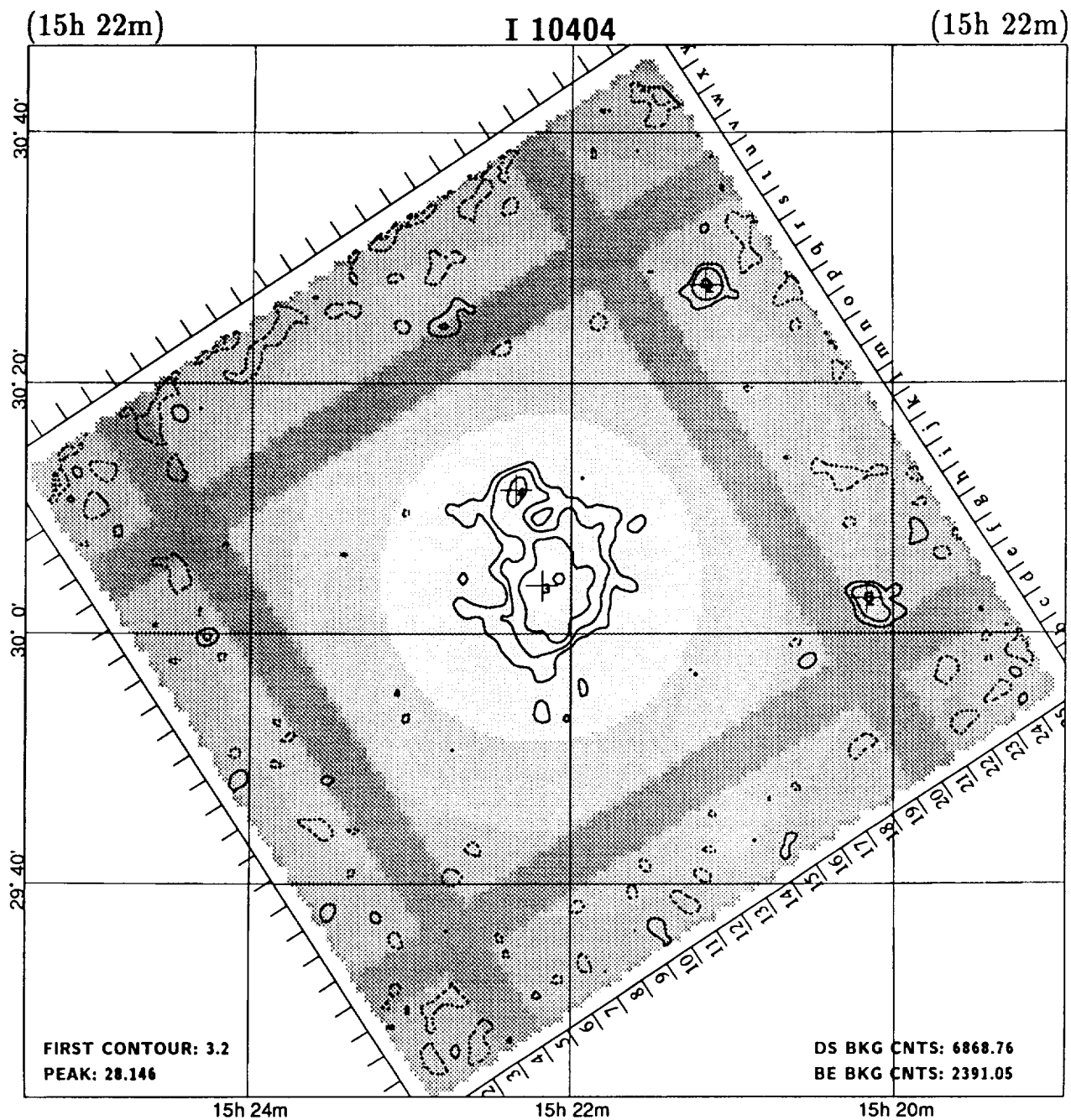


FIELD CENTER:  $15^{\text{h}}21^{\text{m}}10.4^{\text{s}}$   $-51^{\circ}39'14''$  (B1950)  
 $15^{\text{h}}24^{\text{m}}49.8^{\text{s}}$   $-51^{\circ}49'49''$  (J2000)  
 $l: 325.54$   $b: 4.18$

DATE: 1979/240 - 1979/240  
 LIVETIME: 1183.1s  
 ROLL ANGLE:  $71.2^{\circ}$

NH:  $1.5\text{E}+21$   
 REF/ID: S  
 FIELD FLAGS:





FIELD CENTER:  $15^h 22^m 10.0^s$   $30^\circ 04' 58''$  (B1950)  
 $15^h 24^m 13.8^s$   $29^\circ 54' 25''$  (J2000)  
 $l: 46.88$   $b: 56.47$

DATE: 1981/ 11 - 1981/ 11  
 LIVETIME: 5566.1s  
 ROLL ANGLE:  $-123.3^\circ$

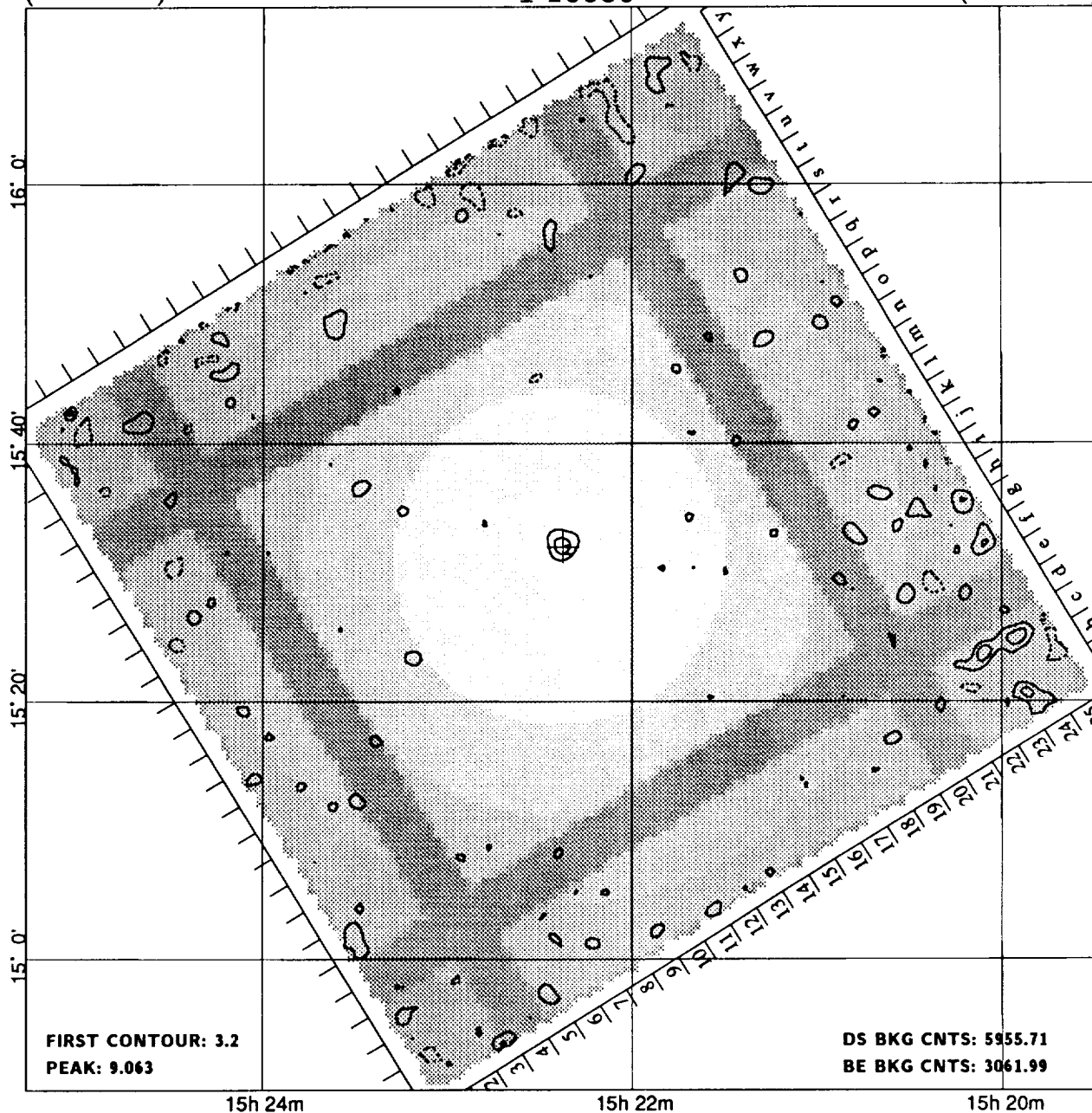
NH:  $2.0E+20$   
 REF/ID: S  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3424	1	15 20 09.8	30 02 48	51	*0.0119	0.0029	27.2	15.8	4.2	1.2	601	26.1	H	
3430	2	15 21 09.8	30 27 50	55	0.0133	0.0029	29.5	12.5	4.5	1.1	0	26.4		S
3432	3	15 22 10.8	30 03 49	32	0.0293	0.0029	121.4	23.6	10.1	7.8	0	0.9	aH	CLG
3433	4	15 22 20.7	30 11 29	41	0.0190	0.0025	72.9	22.1	7.5	16.7	0	7.8	AH	CLG

(15h 22m)

I 10086

(15h 22m)



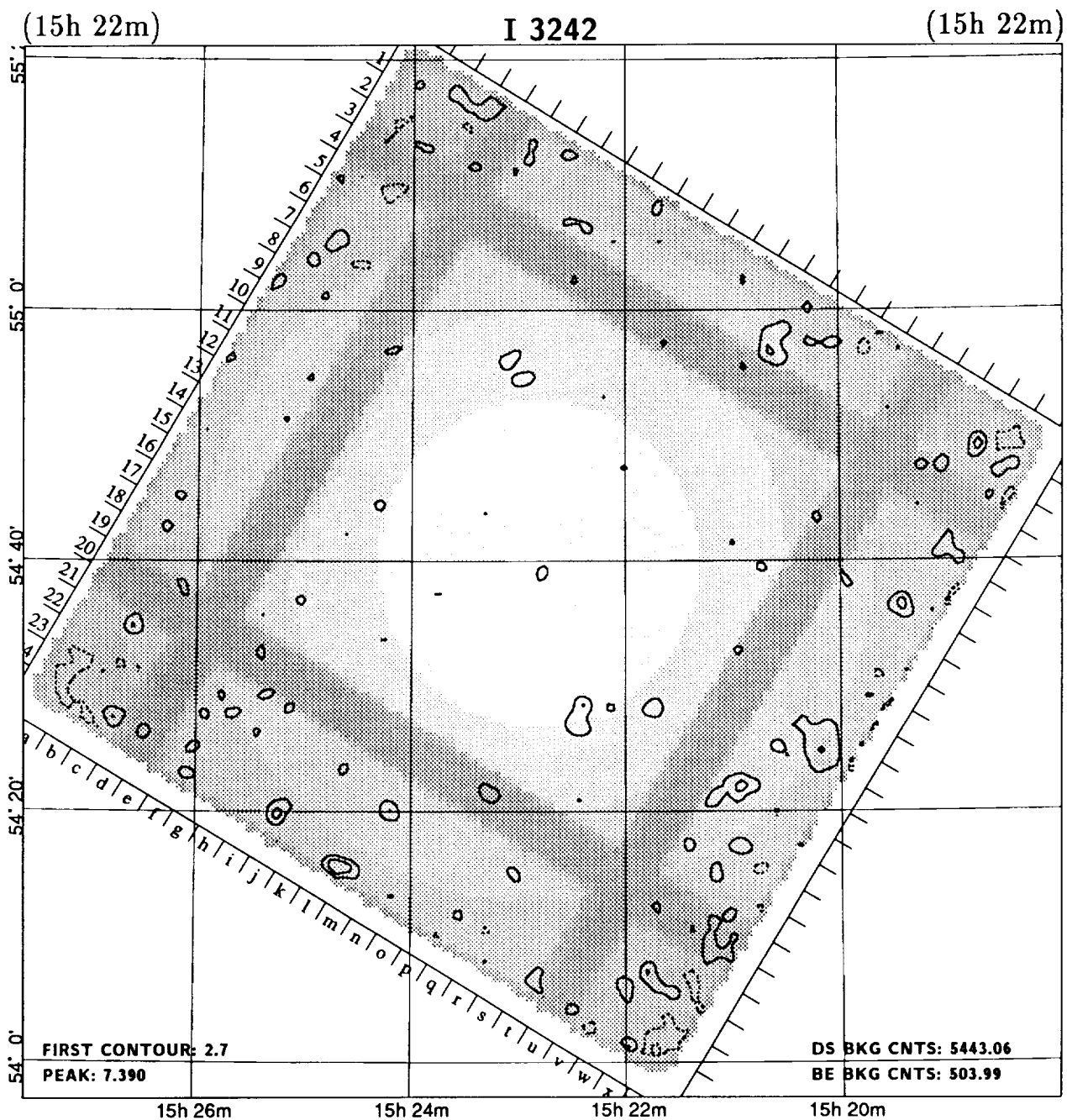
NEAR-SIMULTANEOUS OBSRV's OF OVV QSO's: 1522+155

FIELD CENTER:  $15^h 22^m 22.4^s$   $15^\circ 31' 47''$  (B1950)  
 $15^h 24^m 41.8^s$   $15^\circ 21' 15''$  (J2000)  
 $l: 22.57$   $b: 52.57$

DATE: 1981/ 8 - 1981/ 8  
 LIVETIME: 4826.1s  
 ROLL ANGLE:  $-121.6^\circ$

NH:  $2.8E+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3434	1L	15 22 22.5	15 31 58	36	0.0108	0.0026	38.8	20.2	4.1	0.8	0	0.2		



3C 319: DISTANT CLUSTERS ASSC W/QSO'S

FIELD CENTER: 15<sup>h</sup>22<sup>m</sup>47.0<sup>s</sup> 54°39'10" (B1950)  
15<sup>h</sup>24<sup>m</sup>07.9<sup>s</sup> 54°28'38" (J2000)  
ℓ: 88.10 b: 51.04

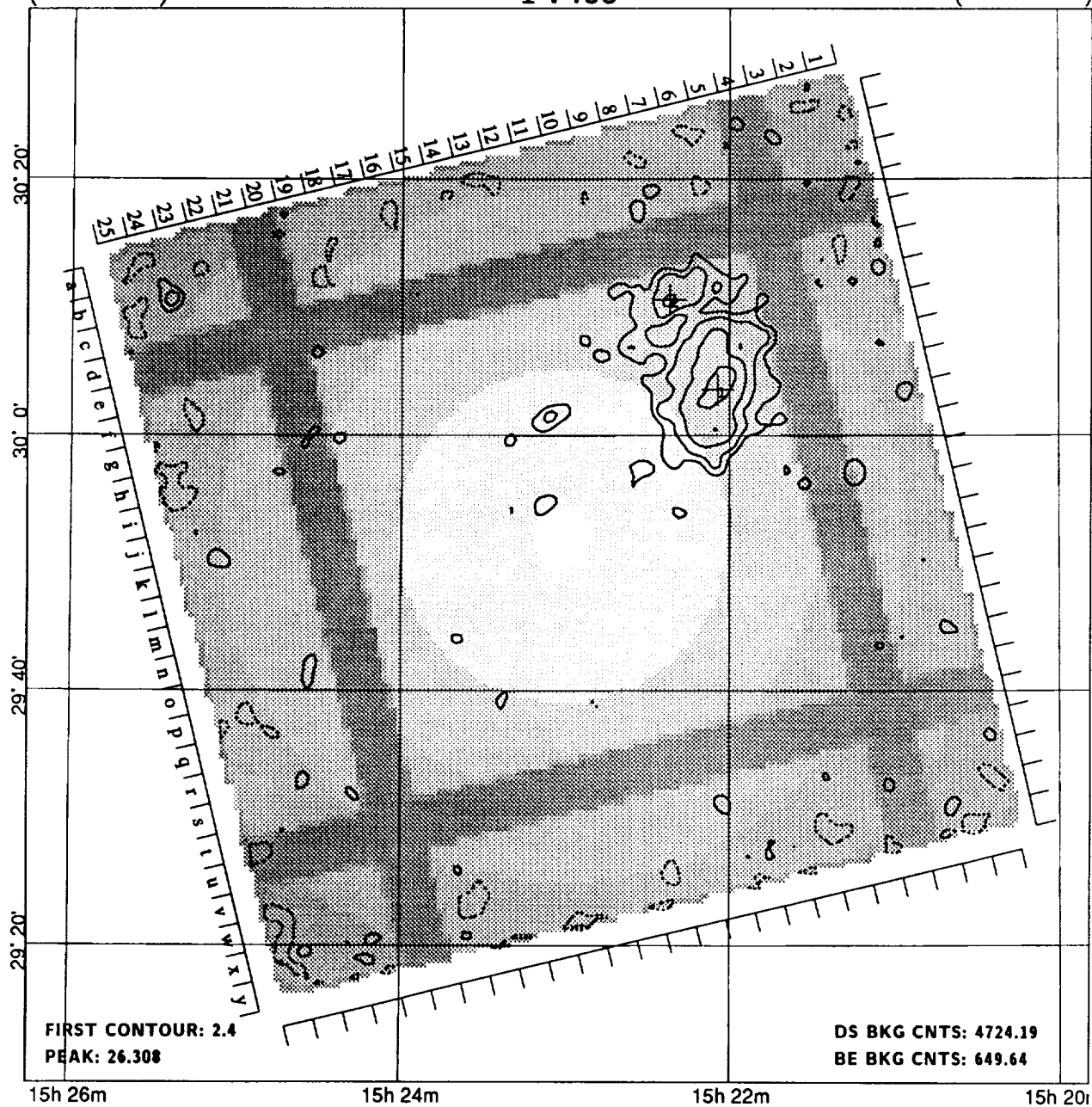
DATE: 1979/167 - 1979/168  
LIVETIME: 4410.7s  
ROLL ANGLE: 31.1°

NH: 1.2E+20  
REF/ID:  
FIELD FLAGS:

(15h 23m)

I 7488

(15h 23m)



## B2 1523+29, SURVEY OF X-RAY EMISSION FROM BL LAC OBJECTS

FIELD CENTER: 15<sup>h</sup>23<sup>m</sup>02.1<sup>s</sup> 29°51'23" (B1950)  
15<sup>h</sup>25<sup>m</sup>06.1<sup>s</sup> 29°40'53" (J2000)  
 $\ell$ : 46.50  $b$ : 56.27

DATE: 1980/223 - 1980/223

NH: 2.0E+20

LIVETIME: 3828.1s

REF/ID: !

ROLL ANGLE: 76.4°

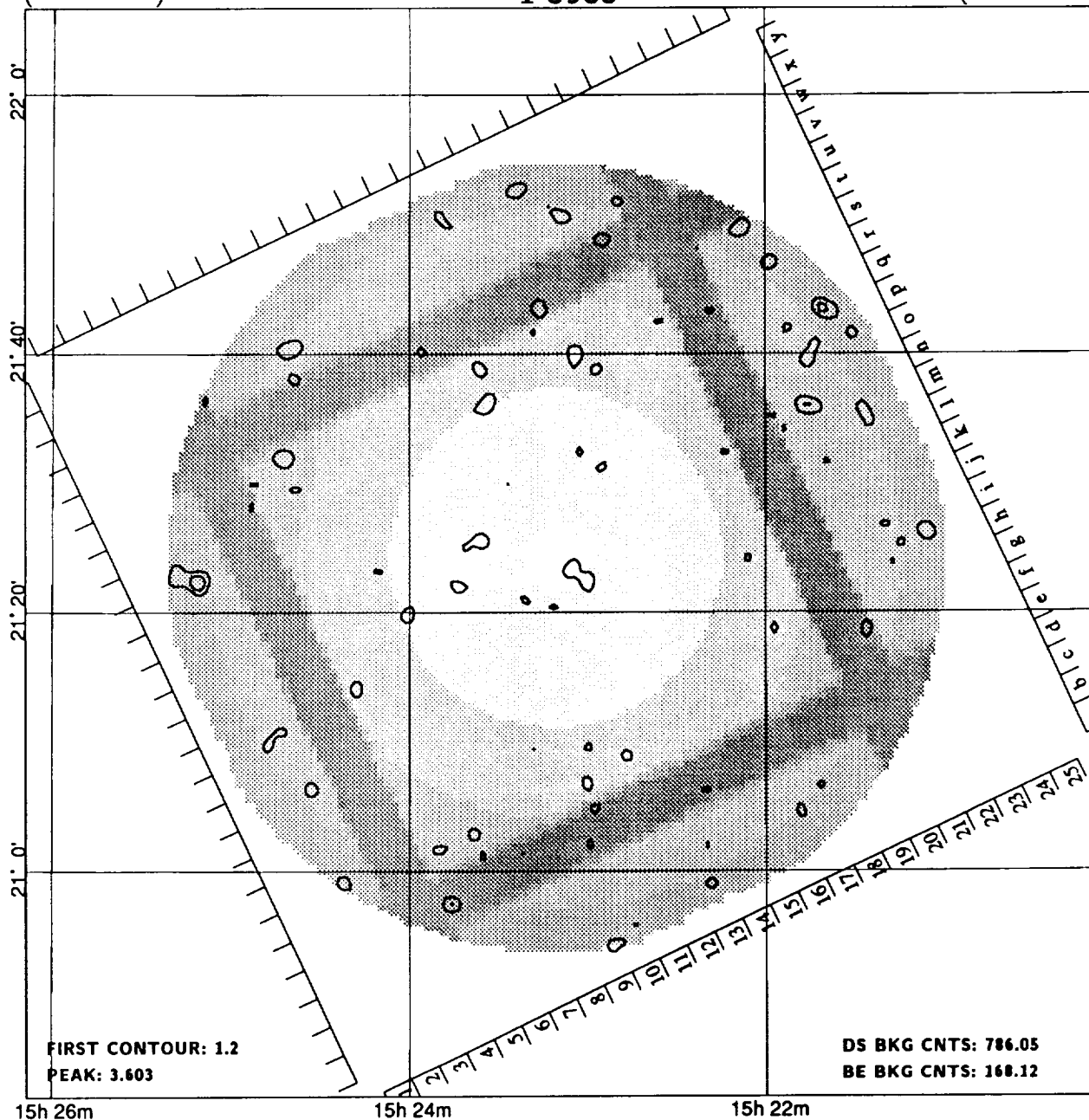
FIELD FLAGS: D

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3431	1	15 22 04.3	30 03 35	48	0.0440	0.0048	94.8	11.2	9.2	6.0	0	17.2	aH	CLG
3433	2	15 22 21.9	30 10 34	51	0.0162	0.0033	31.4	10.6	4.8	17.0	100	21.0	AH	CLG

(15h 23m)

I 3983

(15h 23m)

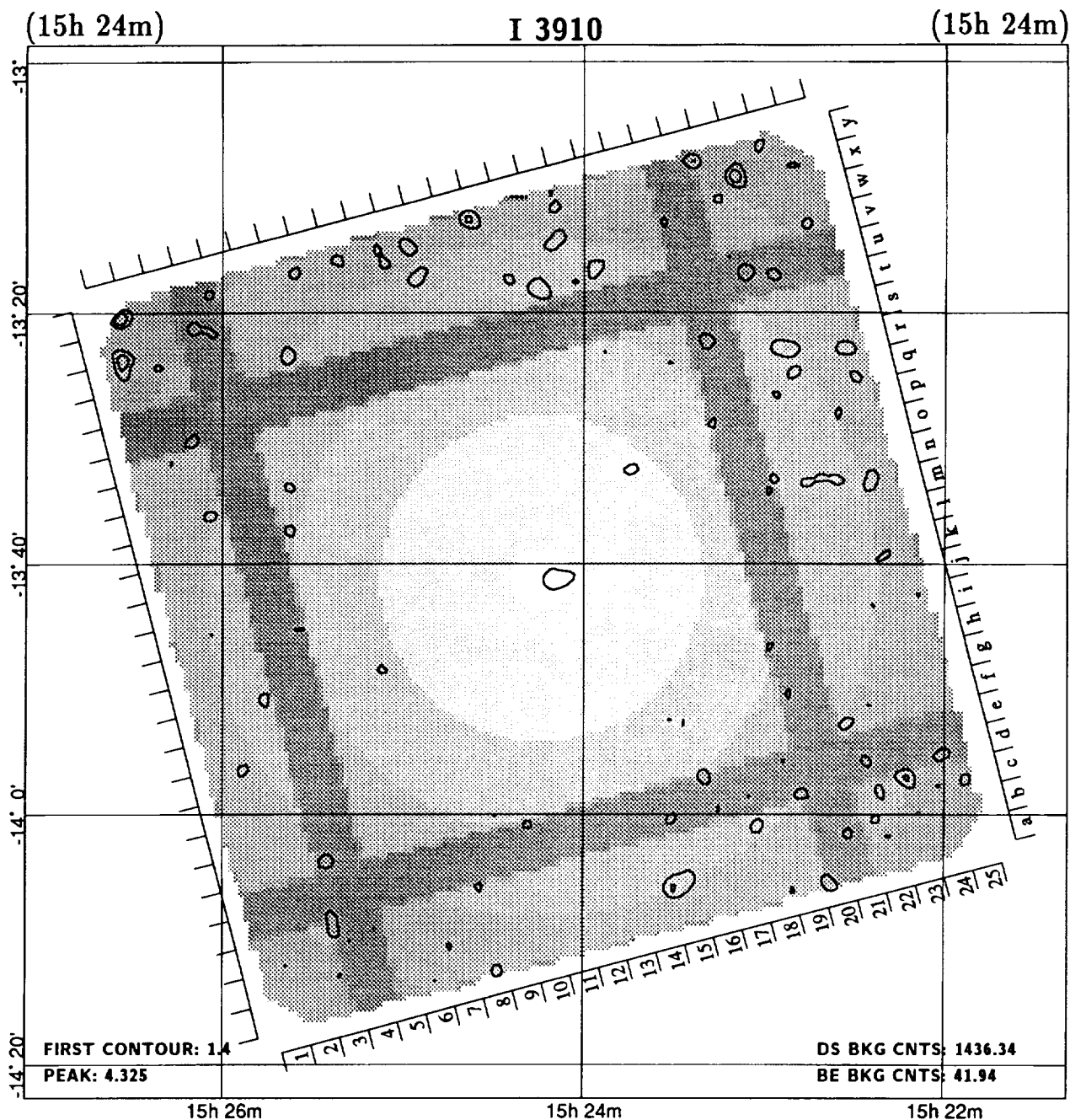


LB 9707, BRIGHT OPTICALLY-SELECTED QUASAR

FIELD CENTER:  $15^{\text{h}}23^{\text{m}}08.8^{\text{s}}$   $21^{\circ}24'35''$  (B1950)  
 $15^{\text{h}}25^{\text{m}}22.2^{\text{s}}$   $21^{\circ}14'06''$  (J2000)  
 $l$ : 31.91  $b$ : 54.54

DATE: 1980/ 21 - 1980/ 21  
LIVETIME: 637.0s  
ROLL ANGLE:  $-115.3^{\circ}$

NH:  $4.4\text{E}+20$   
REF/ID:  
FIELD FLAGS:



**PKS 1524-13, LOW-FREQUENCY VARIABLE RADIO SOURCE**

FIELD CENTER:  $15^{\text{h}}24^{\text{m}}12.2^{\text{s}}$   $-13^{\circ}40'40''$  (B1950)  
 $15^{\text{h}}26^{\text{m}}58.7^{\text{s}}$   $-13^{\circ}51'06''$  (J2000)  
 $l$ : 350.47  $b$ : 34.30

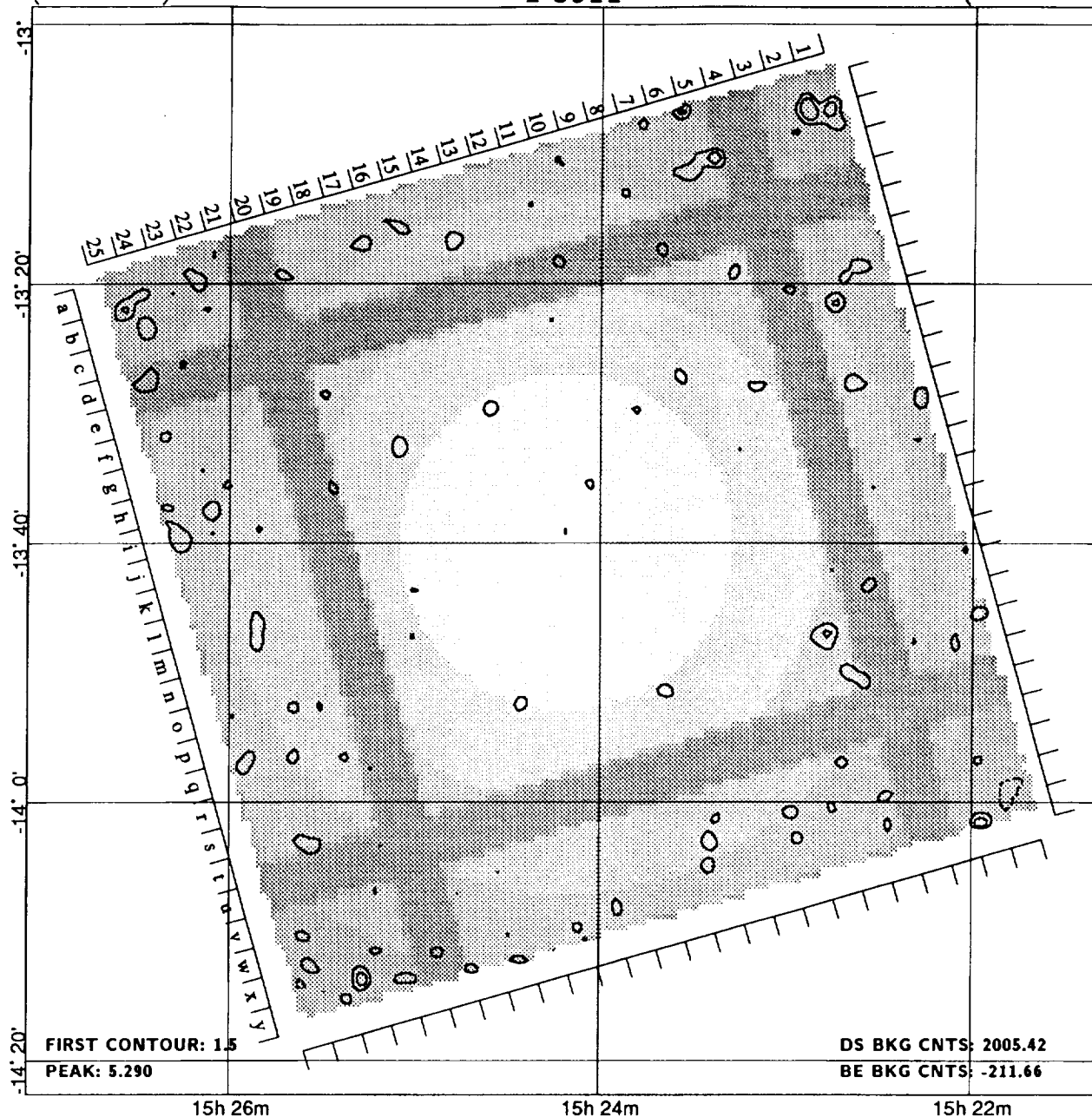
DATE: 1980/ 42 - 1980/ 42  
 LIVETIME: 1163.9s  
 ROLL ANGLE:  $-104.6^{\circ}$

NH:  $9.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

(15h 24m)

I 3911

(15h 24m)



## PKS 1524-13, LOW-FREQUENCY VARIABLE RADIO SOURCE

FIELD CENTER:  $15^{\text{h}}24^{\text{m}}12.2^{\text{s}}$   $-13^{\circ}40'40''$  (B1950)  
 $15^{\text{h}}26^{\text{m}}50.7^{\text{s}}$   $-13^{\circ}51'06''$  (J2000)  
 $l: 350.47$   $b: 34.30$

DATE: 1980/213 - 1980/213  
 LIVETIME: 1625.0s  
 ROLL ANGLE:  $74.2^{\circ}$

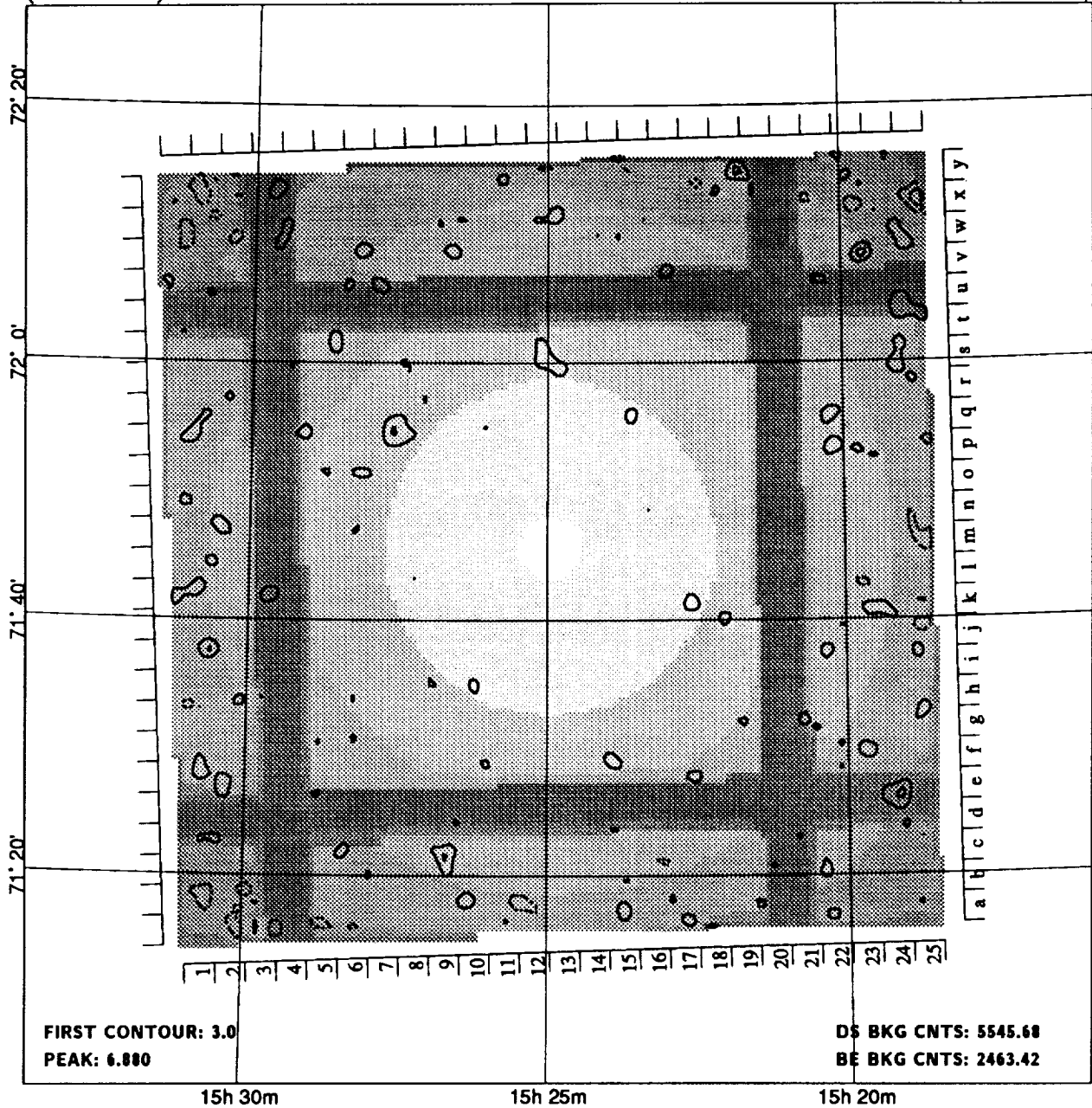
NH:  $9.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C



(15h 24m)

I 6895

(15h 24m)



A2087, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $15^{\text{h}}24^{\text{m}}48.0^{\text{s}}$   $71^{\circ}45'59''$  (B1950)  
 $15^{\text{h}}24^{\text{m}}44.5^{\text{s}}$   $71^{\circ}35'31''$  (J2000)  
 $l: 107.94$   $b: 40.78$

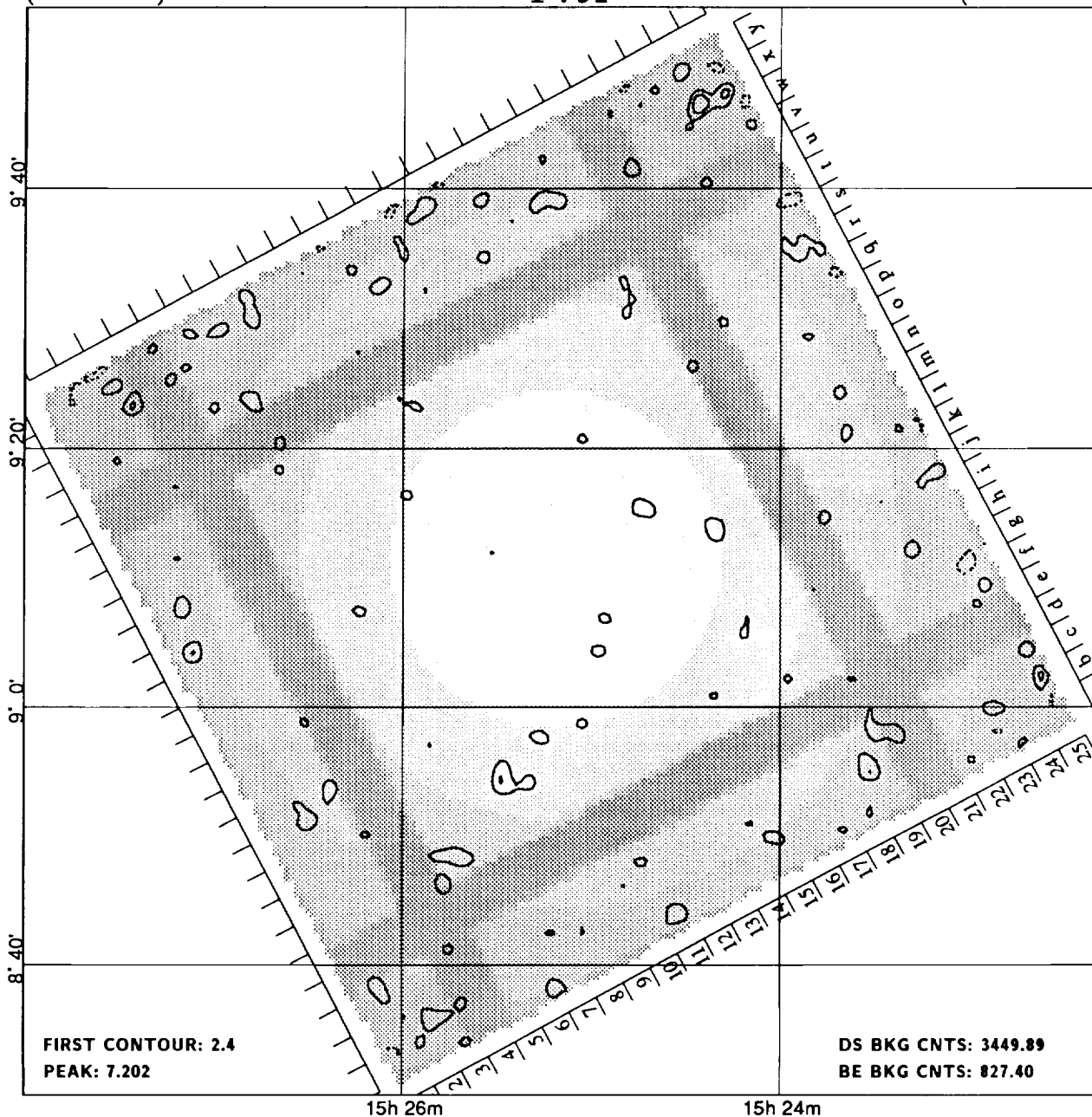
DATE: 1981/ 41 - 1981/ 41  
 LIVETIME: 4493.8s  
 ROLL ANGLE:  $-91.7^{\circ}$

NH:  $2.2\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS:

(15h 25m)

I 791

(15h 25m)



N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}25^{\text{m}}10.0^{\text{s}}$   $09^{\circ}11'59''$  (B1950)  
 $15^{\text{h}}27^{\text{m}}35.3^{\text{s}}$   $09^{\circ}01'37''$  (J2000)  
 $l: 14.26$   $b: 48.96$

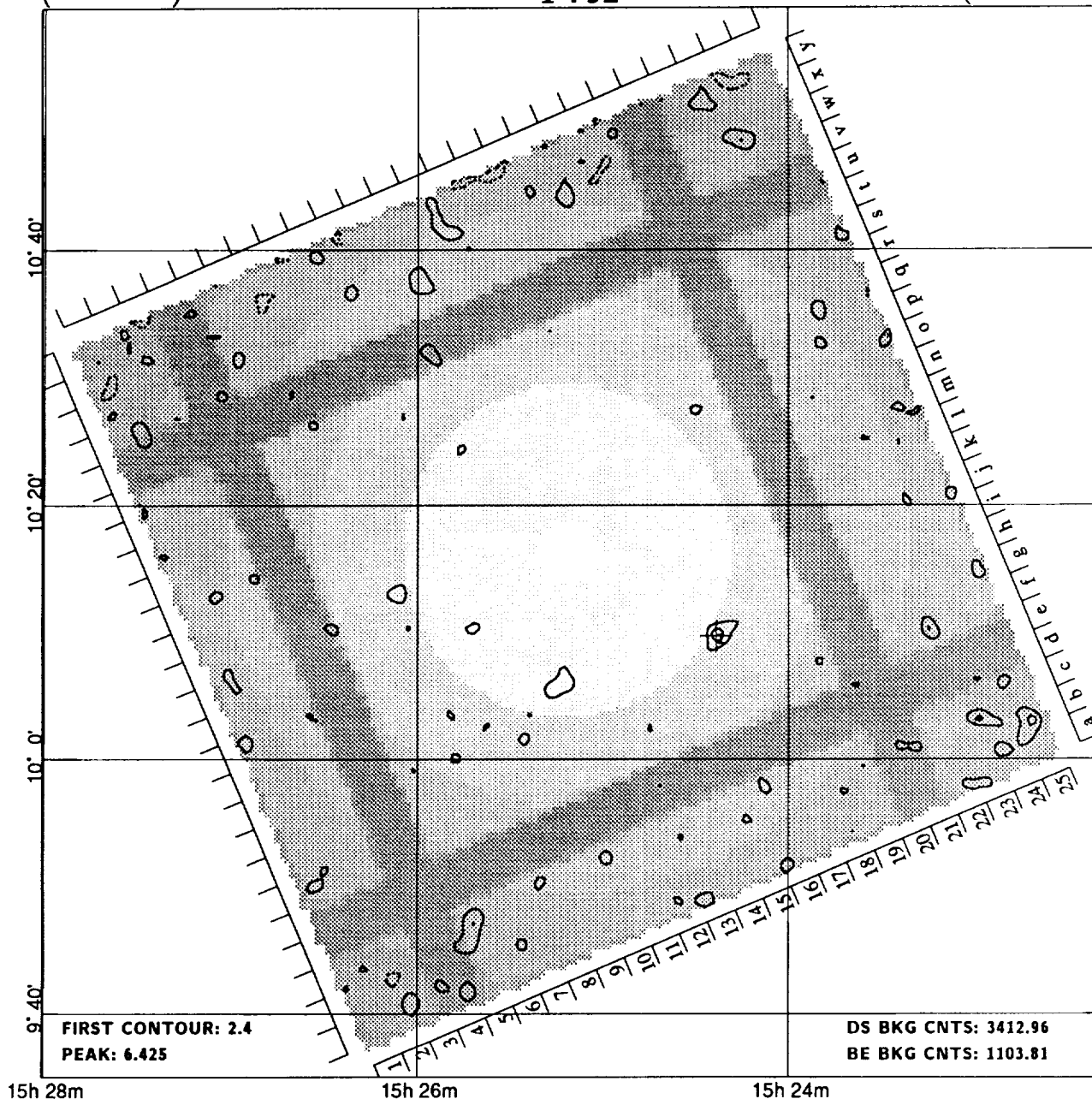
DATE: 1979/ 22 - 1979/ 22  
 LIVETIME: 2795.5s  
 ROLL ANGLE: -118.1°

NH: 3.2E+20  
 REF/ID:  
 FIELD FLAGS:

(15h 25m)

I 792

(15h 25m)



## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}25^{\text{m}}10.0^{\text{s}}$   $10^{\circ}16'59''$  (B1950)

DATE: 1979/ 22 - 1979/ 22

NH:  $3.0\text{E}+20$  $15^{\text{h}}27^{\text{m}}34.3^{\text{s}}$   $10^{\circ}06'37''$  (J2000)

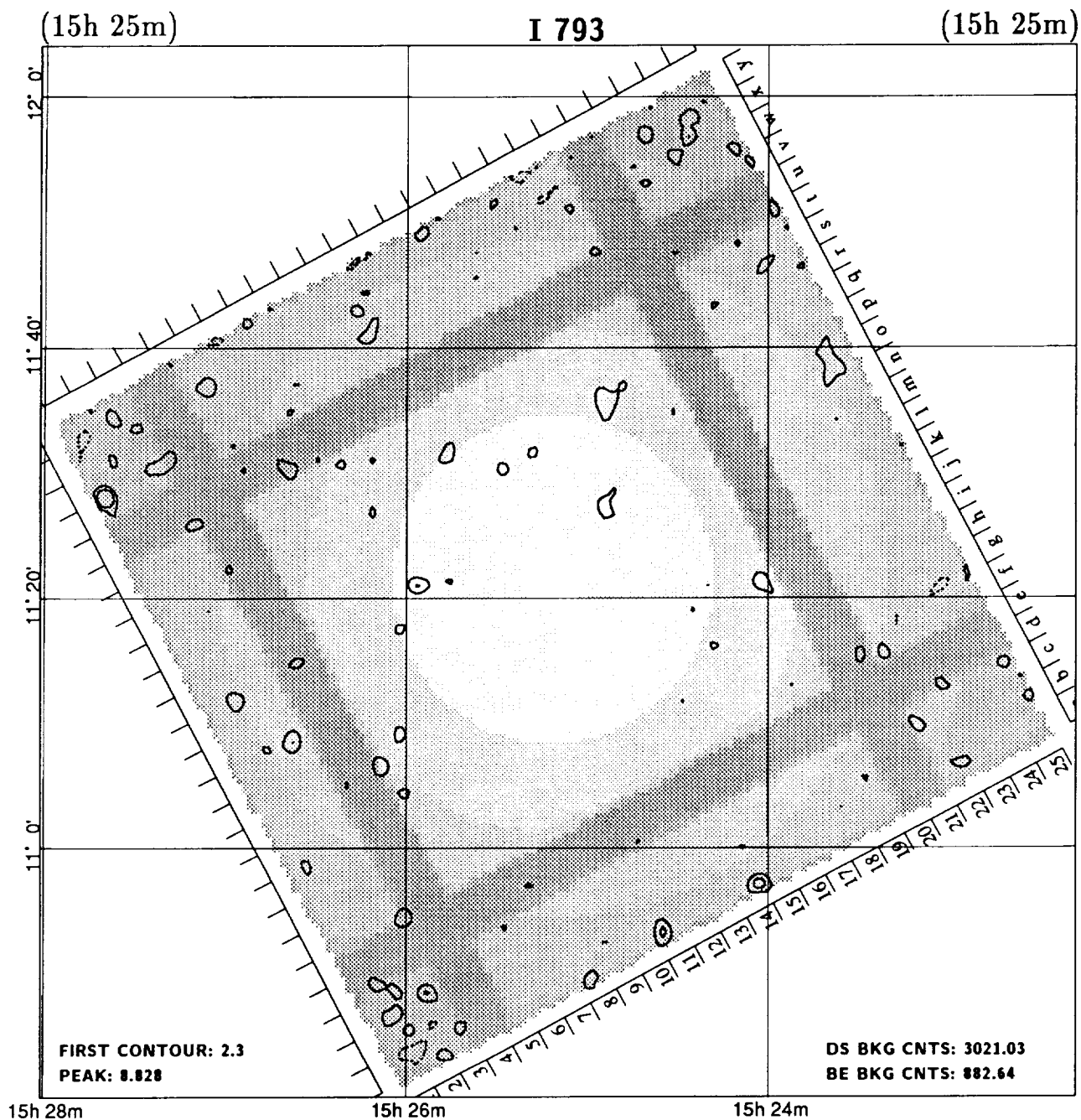
LIVETIME: 2765.7s

REF/ID:

 $l: 15.69$   $b: 49.52$ ROLL ANGLE:  $-112.9^{\circ}$ 

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3435	1	15 24 23.2	10 09 45	47	0.0112	0.0032	19.0	10.0	3.5	0.7	0	13.5	H	Q



**N. POLAR SPUR: SOFT X-RAY BACKGROUND**

**FIELD CENTER:**  $15^h 25^m 10.0^s$   $11^\circ 21' 59''$  (B1950)  
 $15^h 27^m 33.3^s$   $11^\circ 11' 37''$  (J2000)  
 $l: 17.14$   $b: 50.06$

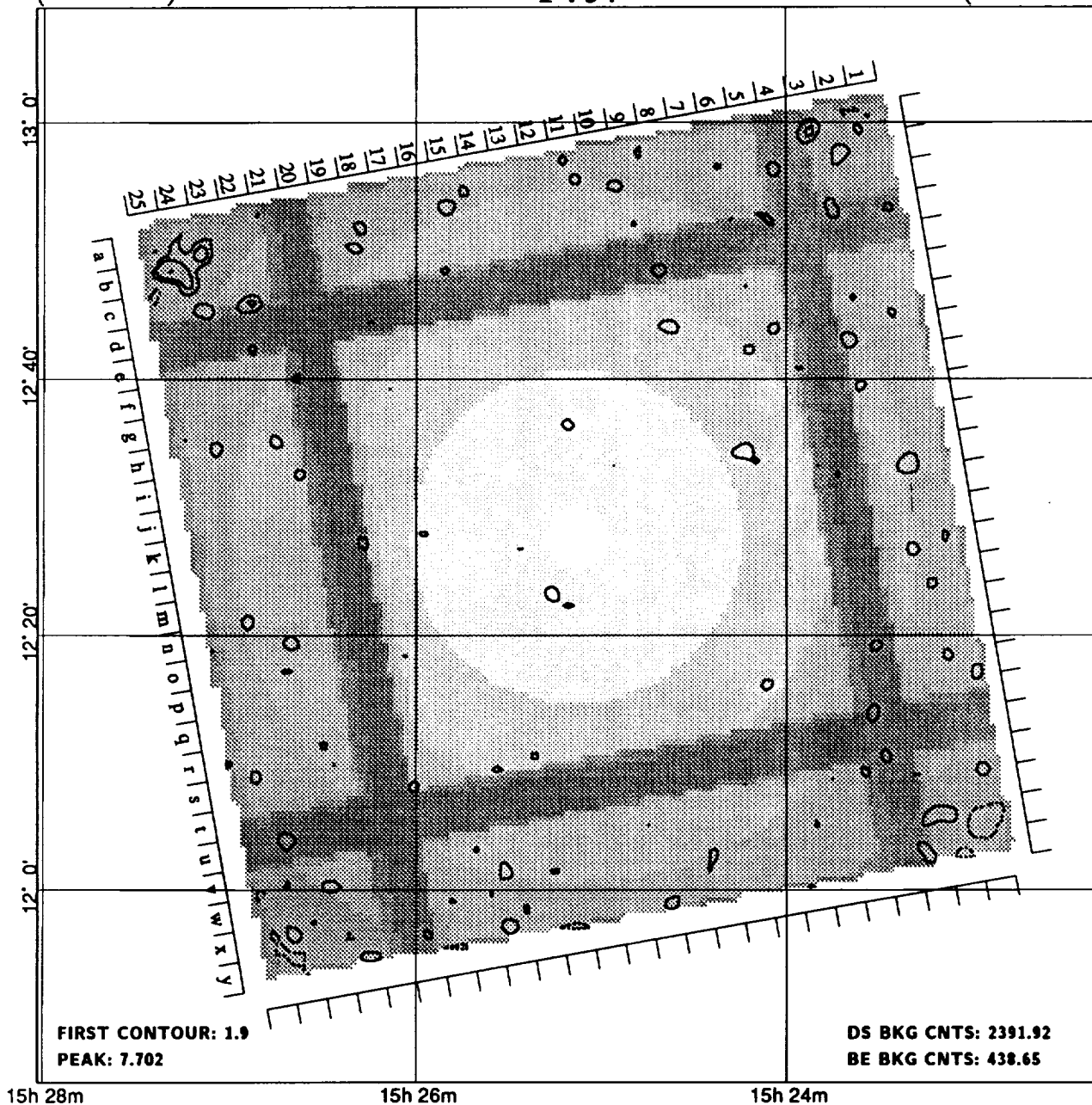
**DATE:** 1979 / 22 - 1979 / 22  
**LIVETIME:** 2448.1s  
**ROLL ANGLE:** -118.0°

**NH:**  $3.1E+20$   
**REF/ID:**  
**FIELD FLAGS:**

(15h 25m)

I 794

(15h 25m)



15h 28m

15h 26m

15h 24m

N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^h 25^m 10.0^s$   $12^\circ 26' 59''$  (B1950)  
 $15^h 27^m 32.3^s$   $12^\circ 16' 37''$  (J2000)  
 $l: 18.63$   $b: 50.58$

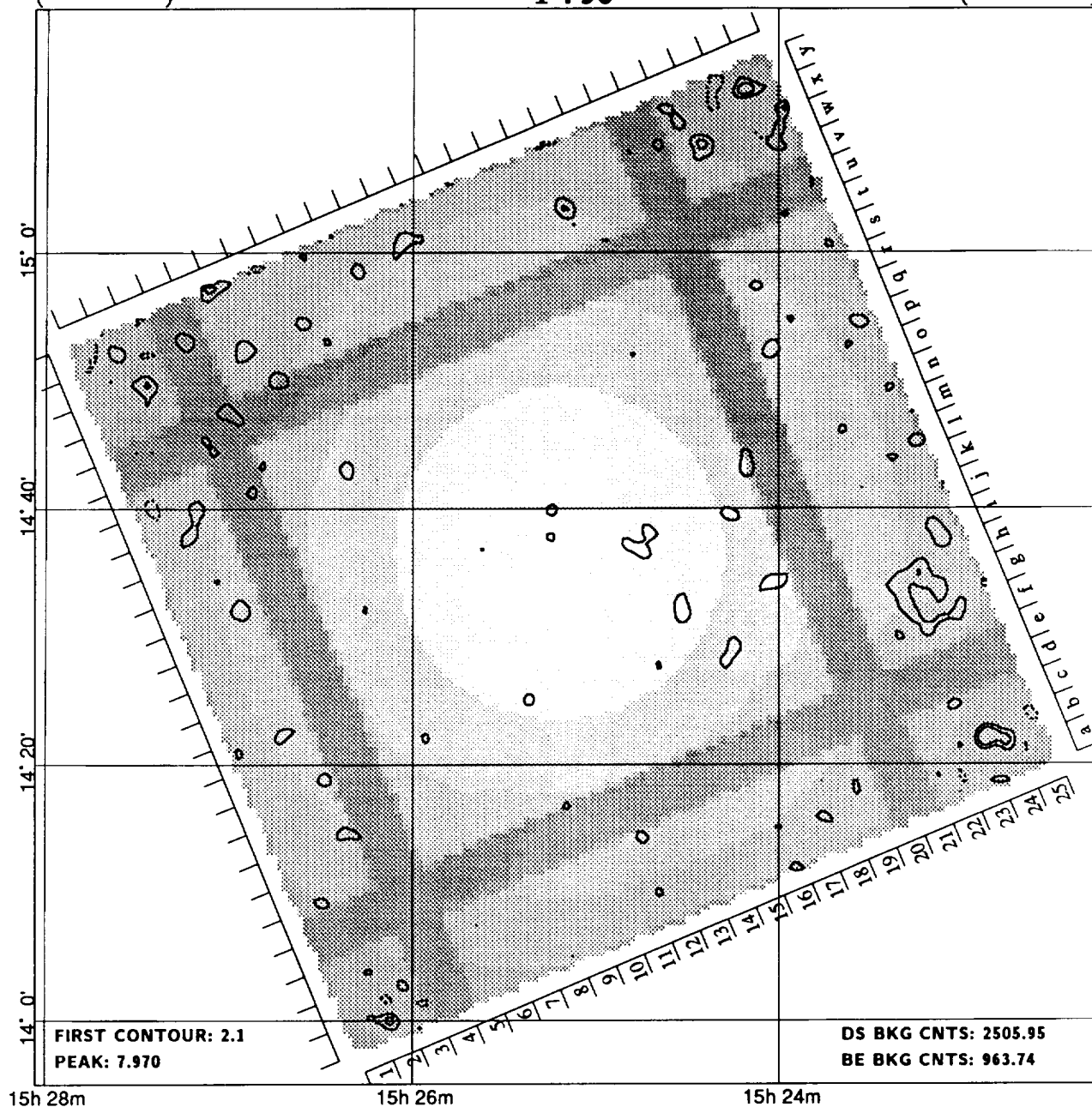
DATE: 1980/220 - 1980/220  
LIVETIME: 1938.2s  
ROLL ANGLE:  $80.0^\circ$

NH:  $3.2E+20$   
REF/ID:  
FIELD FLAGS:

(15h 25m)

I 796

(15h 25m)

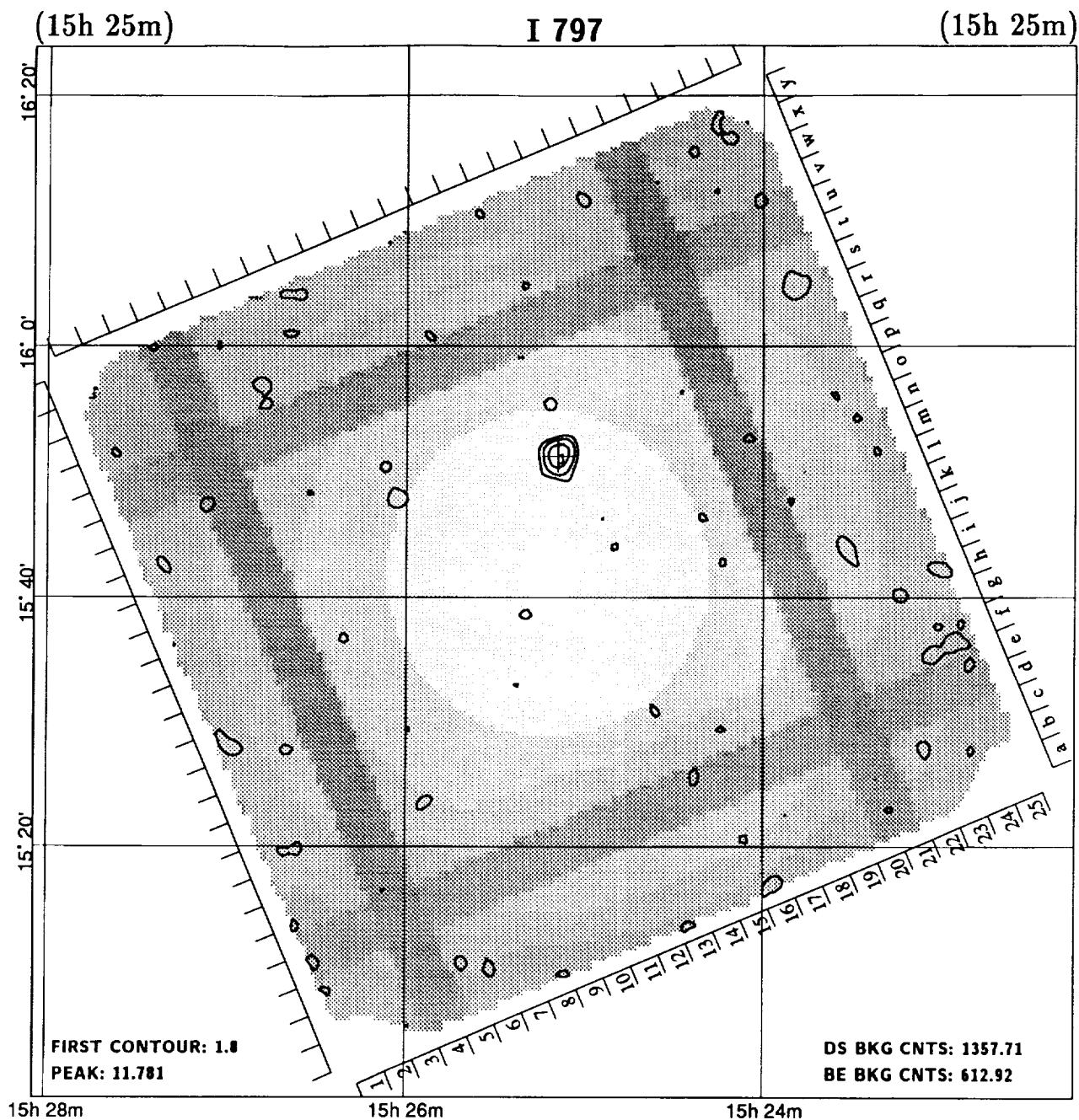


## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}25^{\text{m}}10.0^{\text{s}}$   $14^{\circ}36'59''$  (B1950)  
 $15^{\text{h}}27^{\text{m}}30.2^{\text{s}}$   $14^{\circ}26'37''$  (J2000)  
 $l$ : 21.70  $b$ : 51.57

DATE: 1979/ 24 - 1979/ 24  
 LIVETIME: 2030.6s  
 ROLL ANGLE:  $-112.6^{\circ}$

NH:  $3.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^h 25^m 10.0^s$   $15^\circ 41' 59''$  (B1950)  
 $15^h 27^m 29.1^s$   $15^\circ 31' 37''$  (J2000)  
 $l: 23.28$   $b: 52.03$

DATE: 1979/ 24 - 1979/ 24  
 LIVETIME: 1100.2s  
 ROLL ANGLE:  $-112.9^\circ$

NH:  $2.8E+20$   
 REF/ID:  
 FIELD FLAGS:

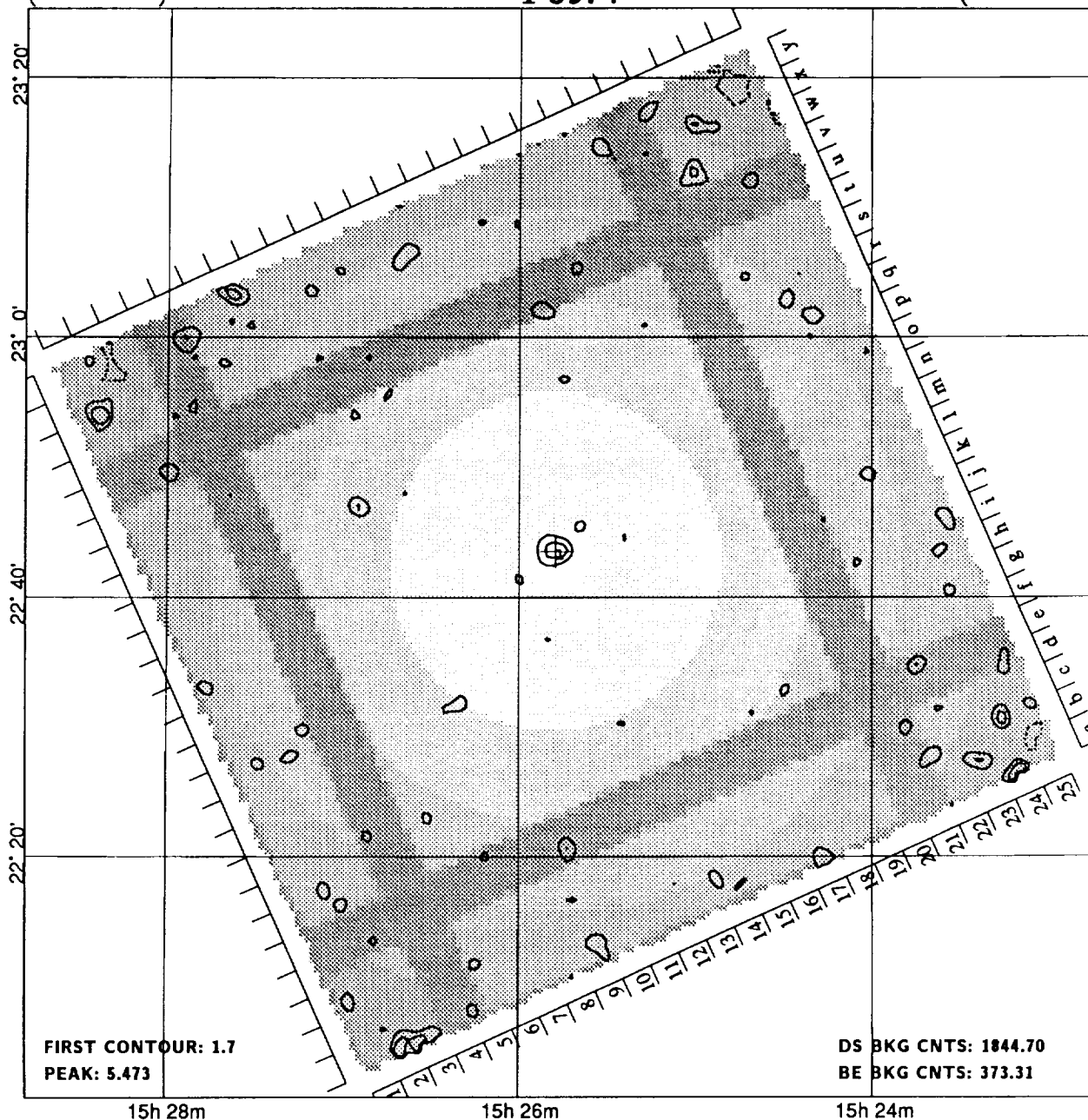
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3436	1	15 25 09.0	15 51 13	41	0.0590	0.0094	43.7	4.3	6.3	1.0	0	9.5	H	Q



(15h 25m)

I 3974

(15h 25m)



FIELD CENTER:  $15^h 25^m 46.1^s$   $22^\circ 43' 22''$  (B1950)  
 $15^h 27^m 58.0^s$   $22^\circ 33' 02''$  (J2000)  
 $l: 34.37$   $b: 54.34$

DATE: 1980/ 23 - 1980/ 23  
 LIVETIME: 1548.1s  
 ROLL ANGLE:  $-114.3^\circ$

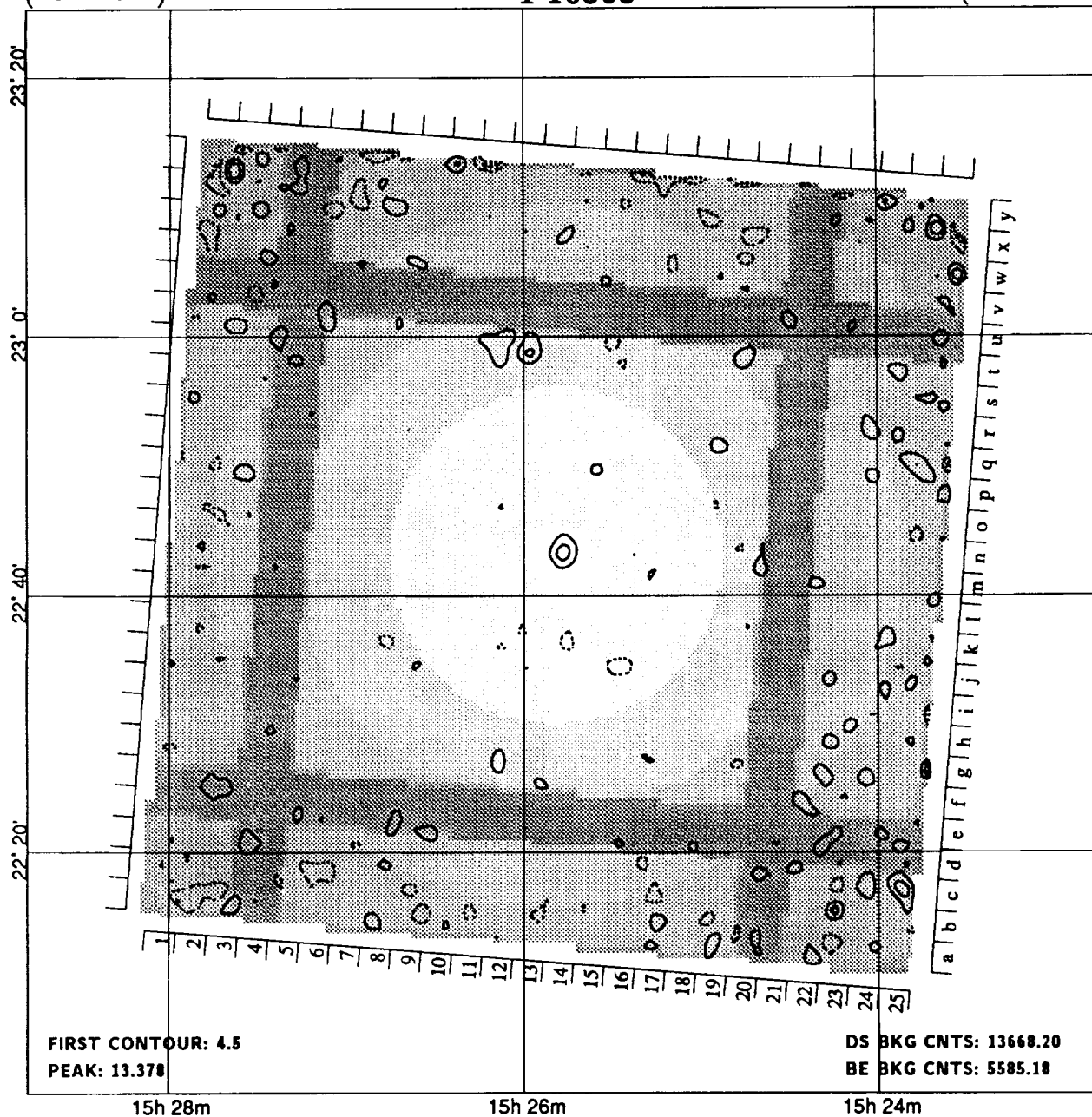
NH:  $4.3E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3438	1	15 25 47.5	22 43 31	37	0.0178	0.0044	20.5	5.5	4.0	0.7	0	0.6	H	Q

(15h 25m)

I 10368

(15h 25m)

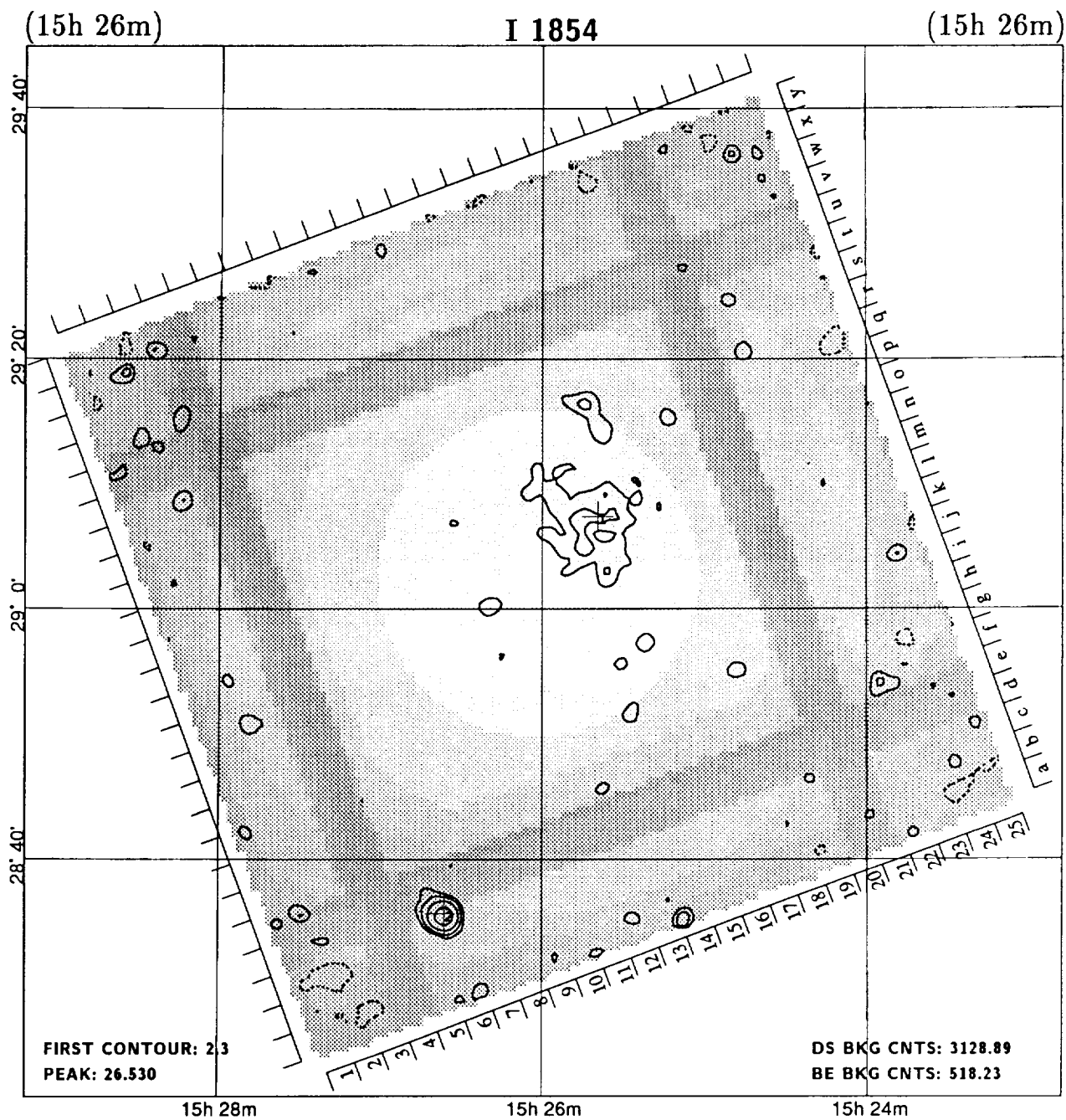


QSO 1525+227

FIELD CENTER:  $15^h 25^m 46.1^s$   $22^\circ 43' 22''$  (B1950)  
 $15^h 27^m 58.0^s$   $22^\circ 33' 02''$  (J2000)  
 $l: 34.37$   $b: 54.34$

DATE: 1981/ 65 - 1981/ 65  
 LIVETIME: 11075.7s  
 ROLL ANGLE:  $-85.4^\circ$

NH:  $4.3E+20$   
 REF/ID:  
 FIELD FLAGS: CL



**A2079: X-RAY STUDY OF CLUSTERS OF GALAXIES**

FIELD CENTER:  $15^{\text{h}}26^{\text{m}}00.0^{\text{s}}$   $29^{\circ}02'59''$  (B1950)  
 $15^{\text{h}}28^{\text{m}}04.7^{\text{s}}$   $28^{\circ}52'39''$  (J2000)  
 $l: 45.20$   $b: 55.54$

DATE: 1979/ 29 - 1979/ 29  
 LIVETIME: 2535.5s  
 ROLL ANGLE:  $-110.3^{\circ}$

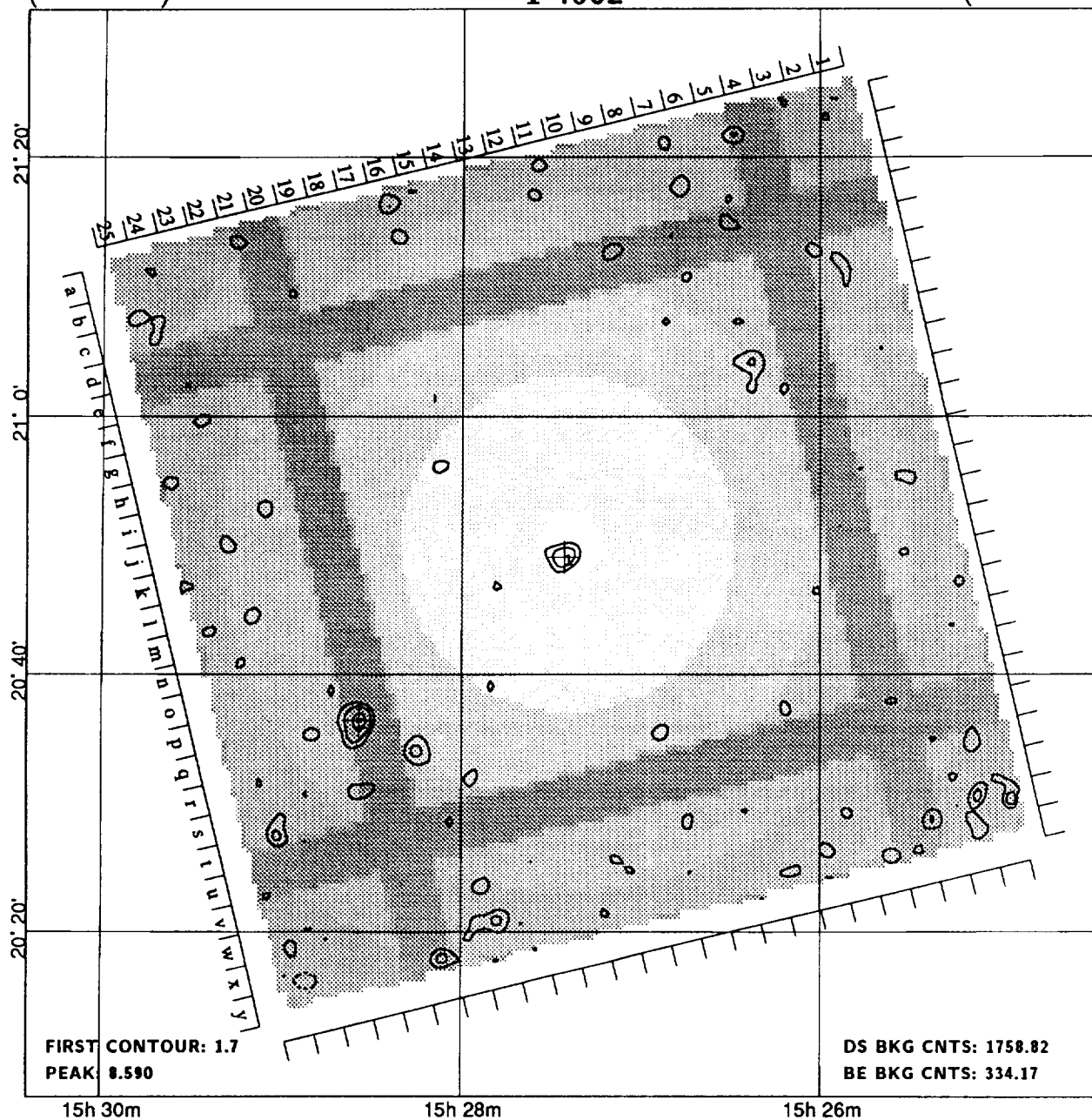
NH:  $2.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3437	1	15 25 39.4	29 07 24	47	0.0121	0.0031	21.4	8.6	3.9	4.7	0	5.9	H	
3439	2	15 26 36.2	28 35 36	50	*0.0505	0.0076	48.6	5.4	6.6	1.0	805	28.4	H	AGN

(15h 27m)

I 4062

(15h 27m)



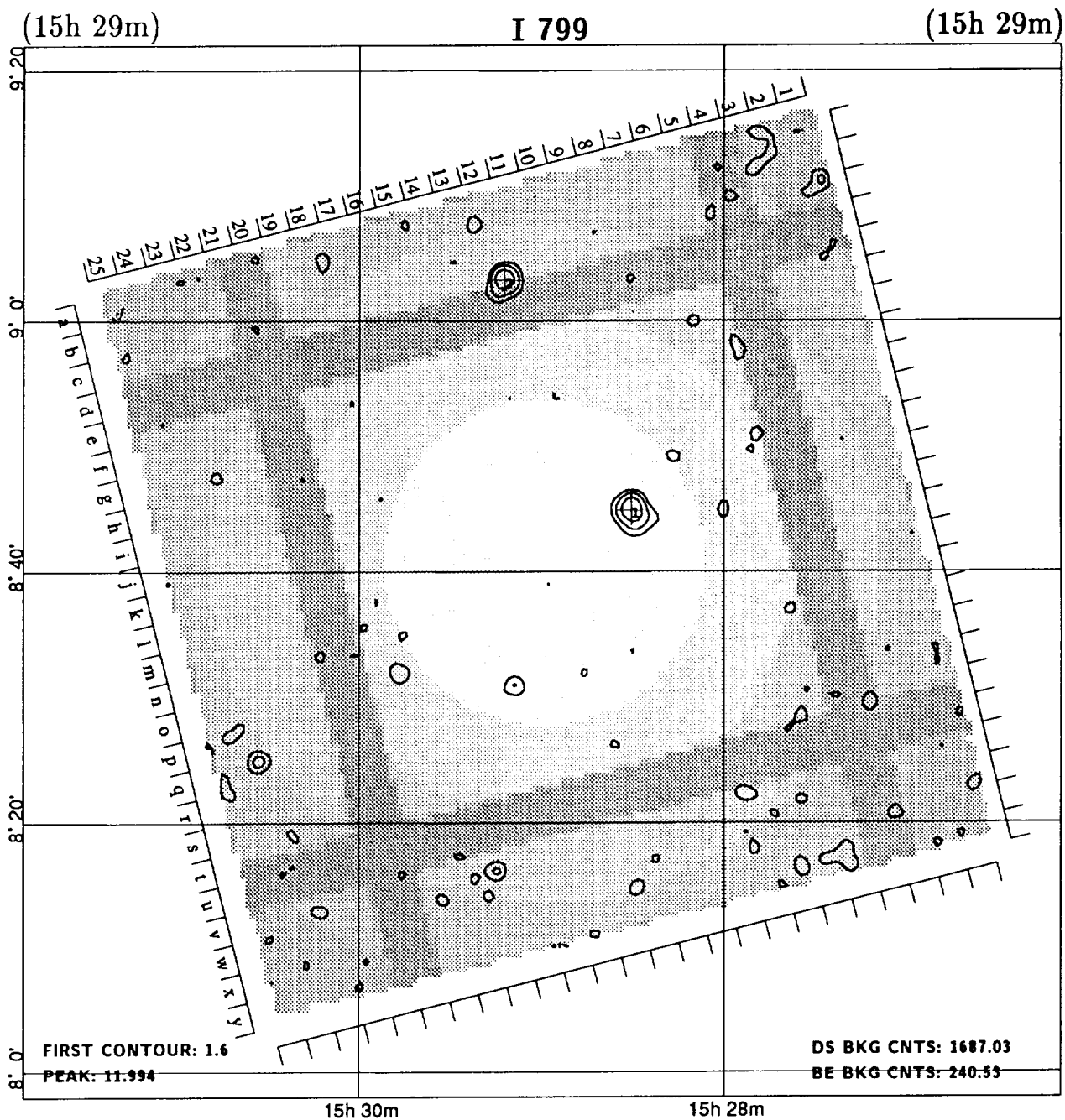
## LB 9763, RADIO QUIET QUASAR WITH CONTINUOUS SPECTRUM

FIELD CENTER:  $15^{\text{h}}27^{\text{m}}25.5^{\text{s}}$   $20^{\circ}49'22''$  (B1950)  
 $15^{\text{h}}29^{\text{m}}39.3^{\text{s}}$   $20^{\circ}39'07''$  (J2000)  
 $l: 31.48$   $b: 53.41$

DATE: 1979/225 - 1979/225  
 LIVETIME: 1425.2s  
 ROLL ANGLE:  $76.5^{\circ}$

NH:  $4.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3441	1	15 27 25.7	20 49 06	37	0.0166	0.0045	17.6	5.4	3.7	0.7	0	0.2	H
3444	2	15 28 34.3	20 36 26	53	*0.0283	0.0068	19.6	2.4	4.2	0.9	1009	20.9	



FIELD CENTER:  $15^{\text{h}}29^{\text{m}}00.0^{\text{s}}$   $08^{\circ}39'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}25.7^{\text{s}}$   $08^{\circ}29'50''$  (J2000)  
 $l: 14.33$   $b: 47.88$

DATE: 1979/226 - 1979/226  
 LIVETIME: 1367.1s  
 ROLL ANGLE:  $75.9^{\circ}$

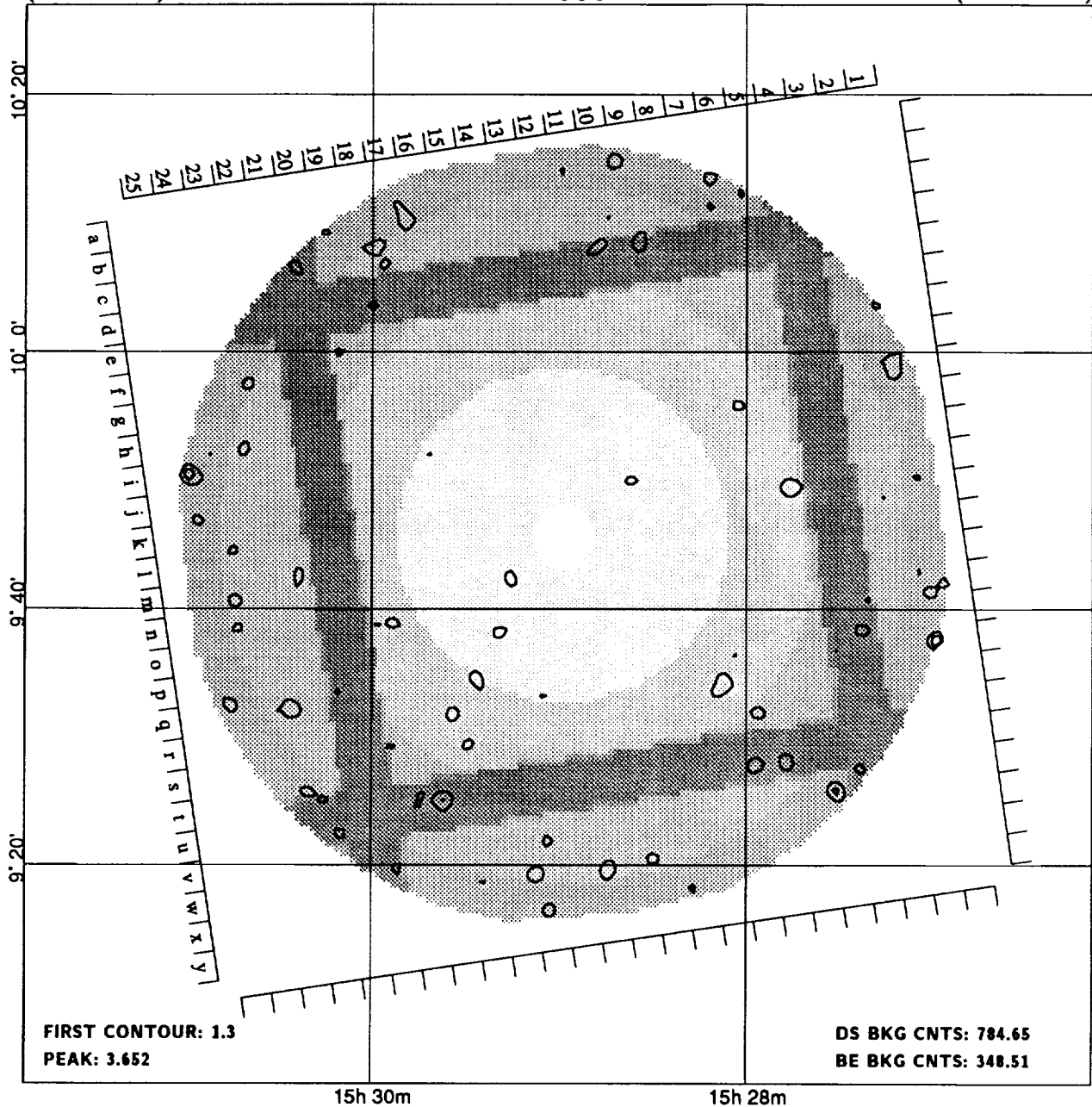
NH:  $3.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3443	1	15 28 30.3	08 44 57	41	0.0421	0.0071	39.4	4.6	5.9	1.0	0	8.8	H	S
3446	2	15 29 12.1	09 03 15	51	*0.0348	0.0078	22.2	2.8	4.4	0.8	803	23.5	H	

(15h 29m)

I 800

(15h 29m)



## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}29^{\text{m}}00.0^{\text{s}}$   $09^{\circ}44'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}24.7^{\text{s}}$   $09^{\circ}34'50''$  (J2000)  
 $l: 15.72$   $b: 48.44$

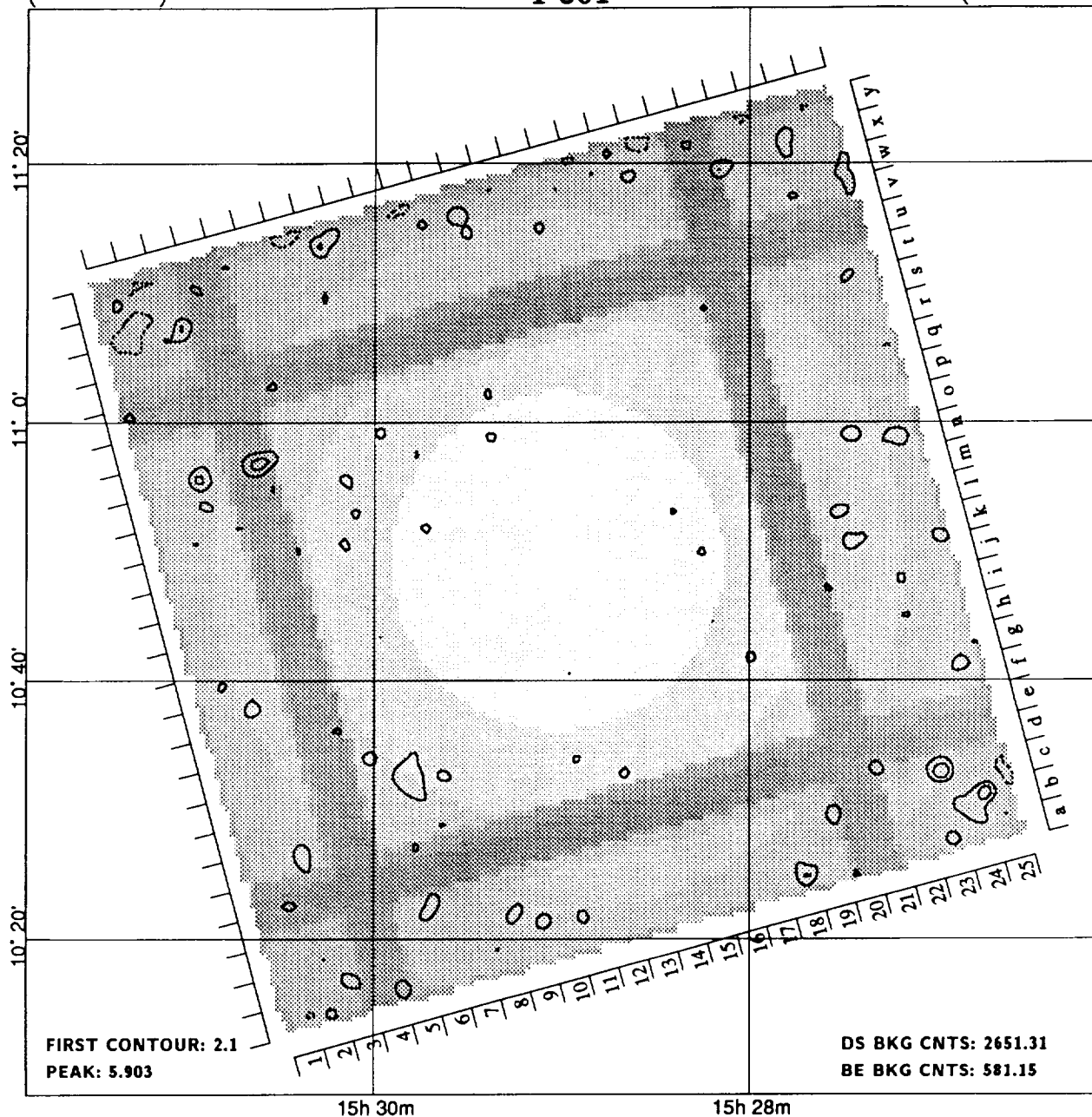
DATE: 1980/238 - 1980/238  
 LIVETIME: 635.8s  
 ROLL ANGLE:  $81.4^{\circ}$

NH:  $3.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 29m)

I 801

(15h 29m)



N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}29^{\text{m}}00.0^{\text{s}}$   $10^{\circ}49'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}23.7^{\text{s}}$   $10^{\circ}39'50''$  (J2000)  
 $l: 17.14$   $b: 48.98$

DATE: 1979/ 27 - 1979/ 27  
 LIVETIME: 2148.4s  
 ROLL ANGLE:  $-105.0^{\circ}$

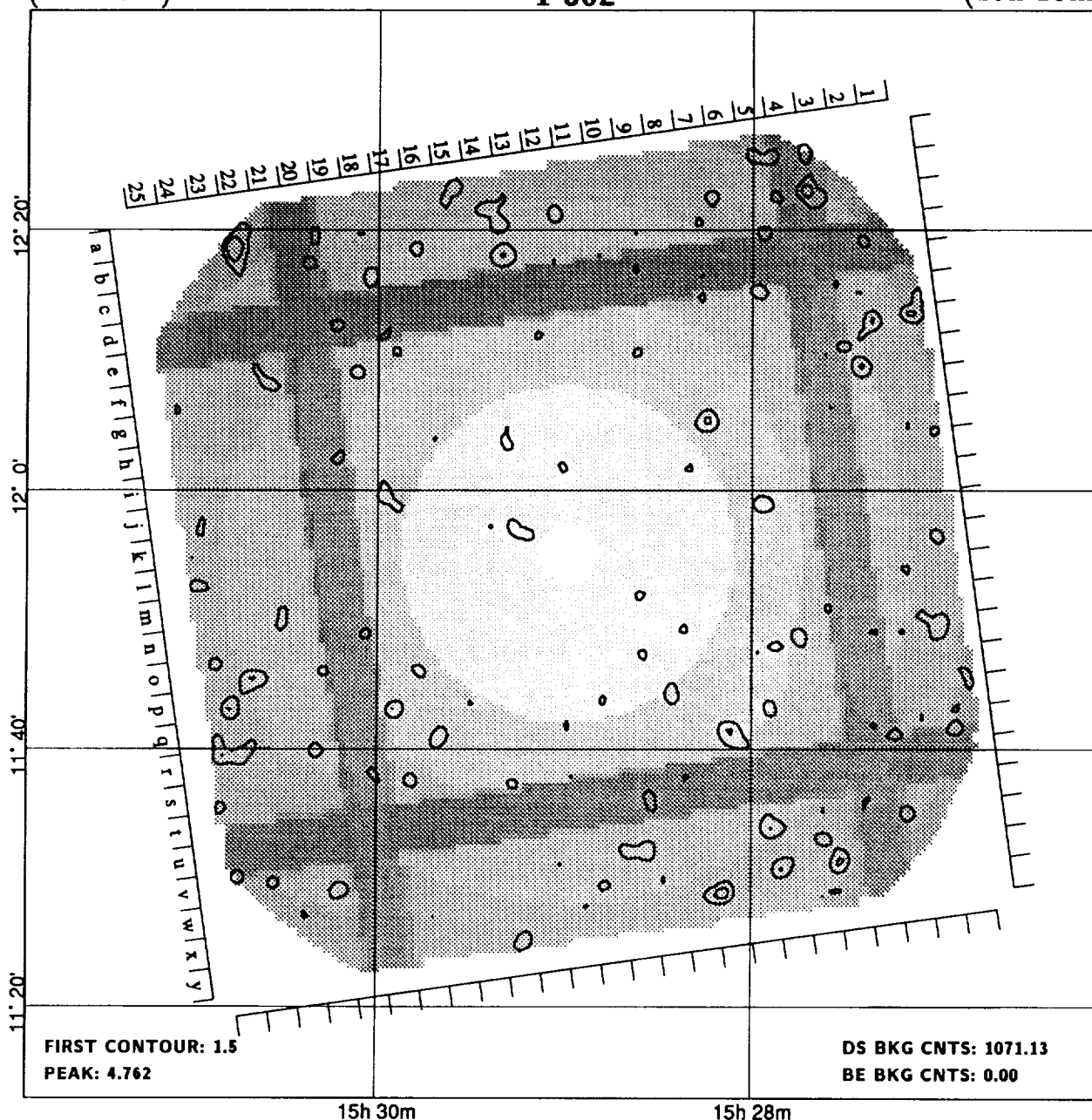
NH:  $3.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



(15h 29m)

I 802

(15h 29m)



## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER: 15<sup>h</sup>29<sup>m</sup>00.0<sup>s</sup> 11°54'59" (B1950)  
 15<sup>h</sup>31<sup>m</sup>22.6<sup>s</sup> 11°44'50" (J2000)  
 $l$ : 18.59  $b$ : 49.51

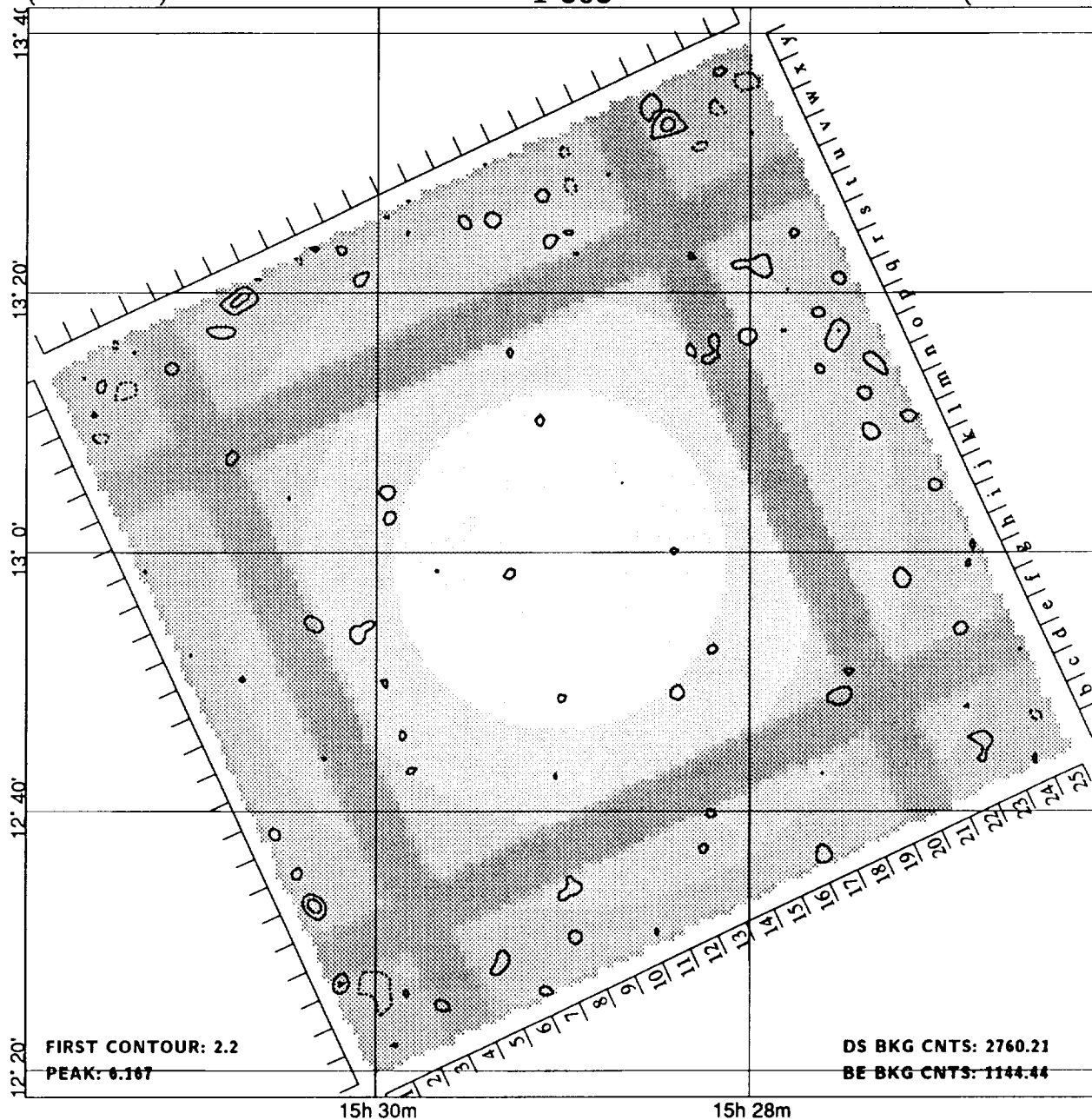
DATE: 1980/238 - 1980/238  
 LIVETIME: 868.0s  
 ROLL ANGLE: 81.9°

NH: 3.2E+20  
 REF/ID:  
 FIELD FLAGS: L

(15h 29m)

I 803

(15h 29m)



## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}29^{\text{m}}00.0^{\text{s}}$   $12^{\circ}59'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}21.6^{\text{s}}$   $12^{\circ}49'50''$  (J2000)  
 $l: 20.07$   $b: 50.01$

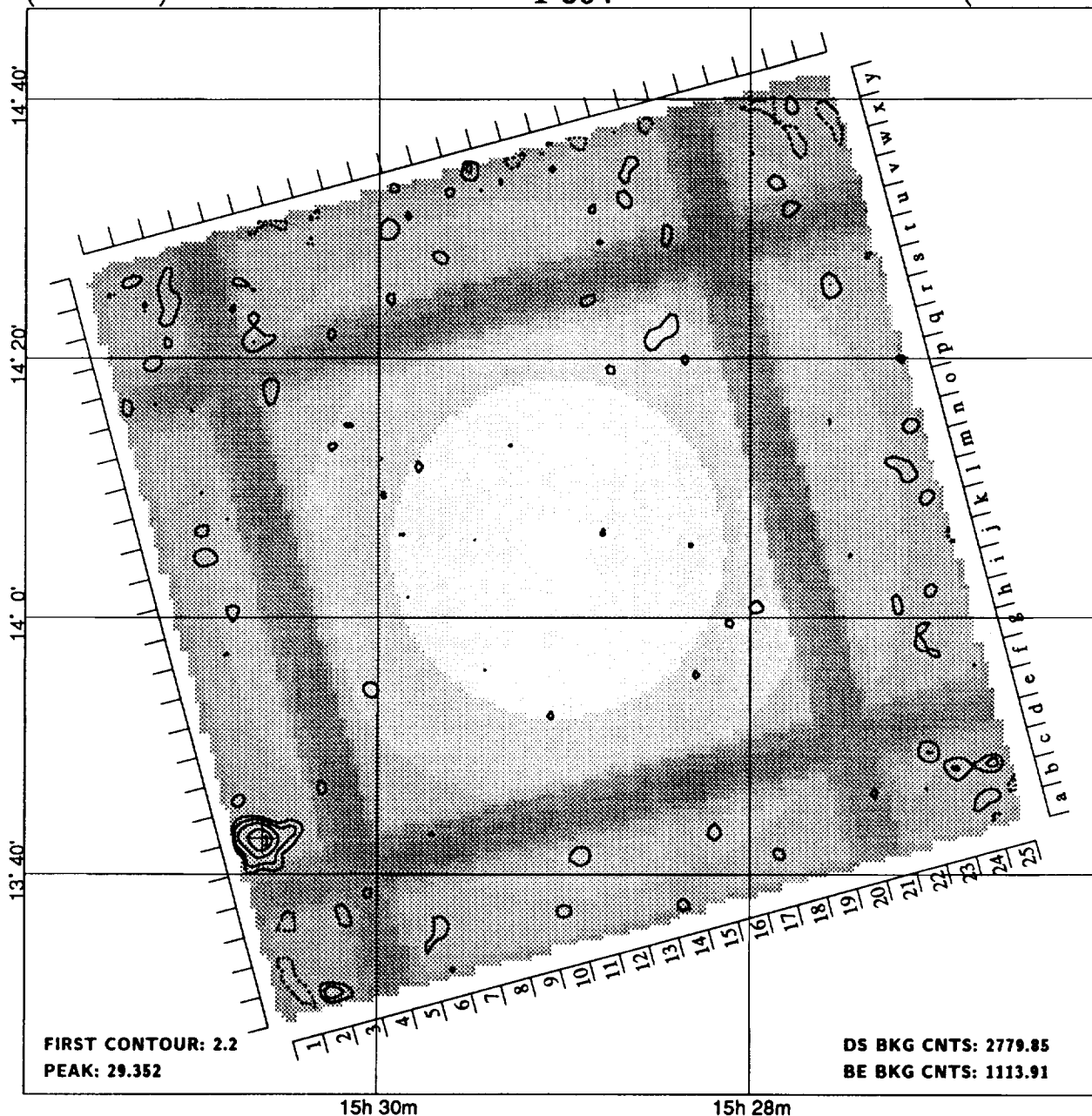
DATE: 1979/ 27 - 1979/ 27  
 LIVETIME: 2236.7s  
 ROLL ANGLE:  $-115.1^{\circ}$

NH:  $3.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(15h 29m)

I 804

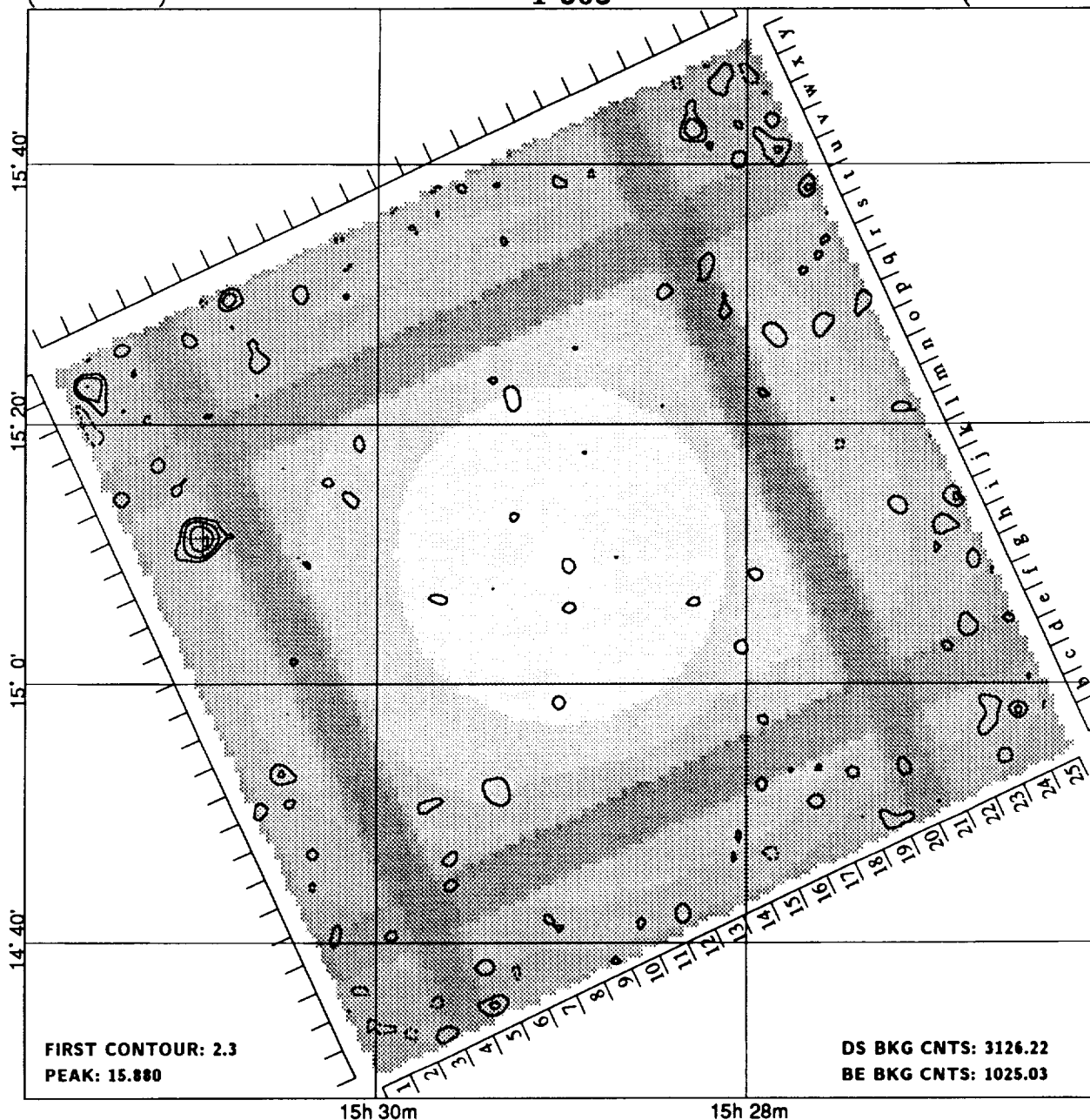
(15h 29m)



(15h 29m)

I 805

(15h 29m)



FIELD CENTER:  $15^{\text{h}}29^{\text{m}}00.0^{\text{s}}$   $15^{\circ}09'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}19.4^{\text{s}}$   $14^{\circ}59'50''$  (J2000)  
 $l: 23.13$   $b: 50.97$

DATE: 1979/ 27 - 1979/ 28  
 LIVETIME: 2533.3s  
 ROLL ANGLE: -115.0°

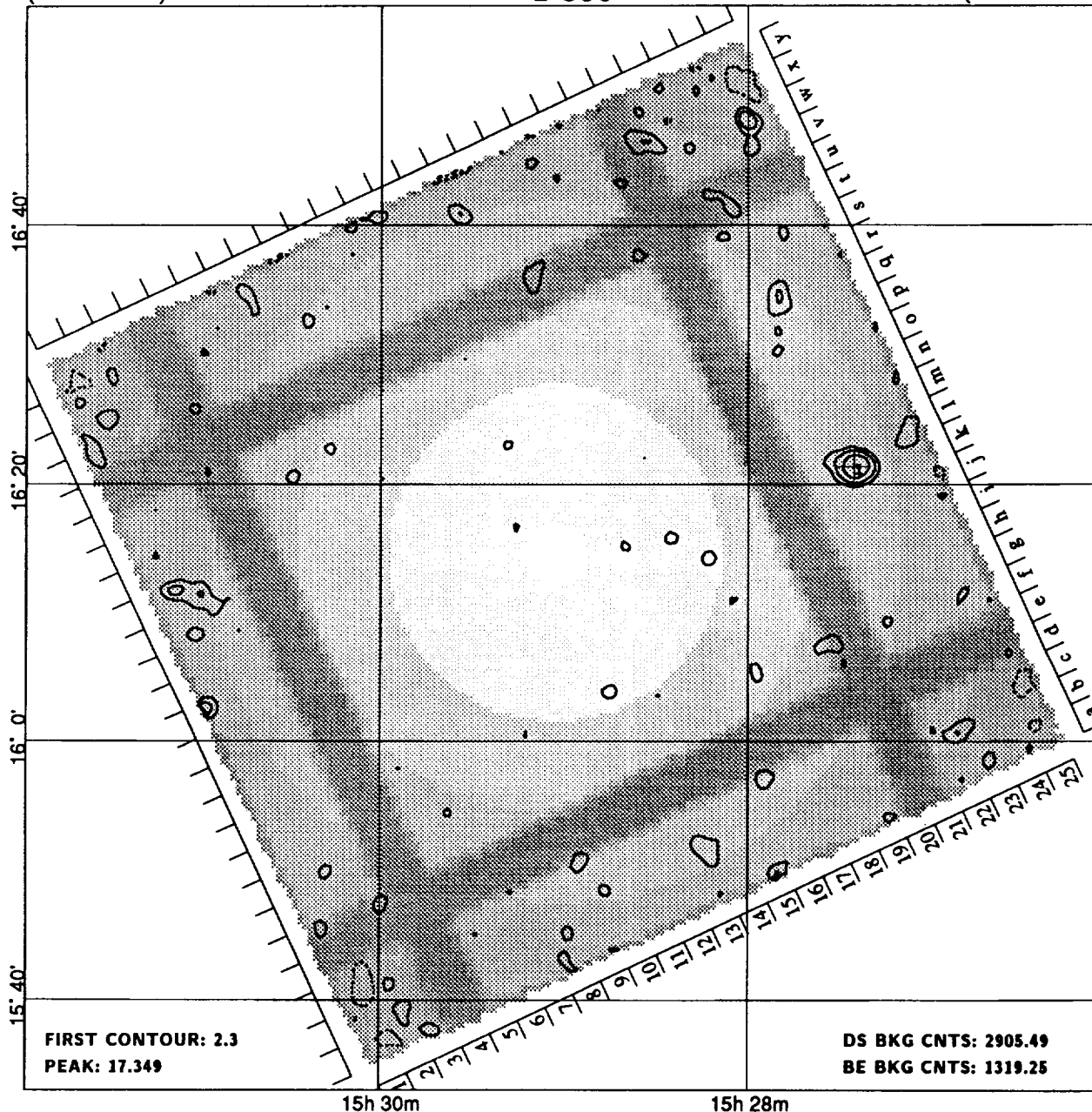
NH: 3.3E+20  
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3454	1L	15 30 56.6	15 11 14	51	*0.0365	0.0082	35.3	6.4	4.3	0.9	401	28.1	A	AGN

(15h 29m)

I 806

(15h 29m)



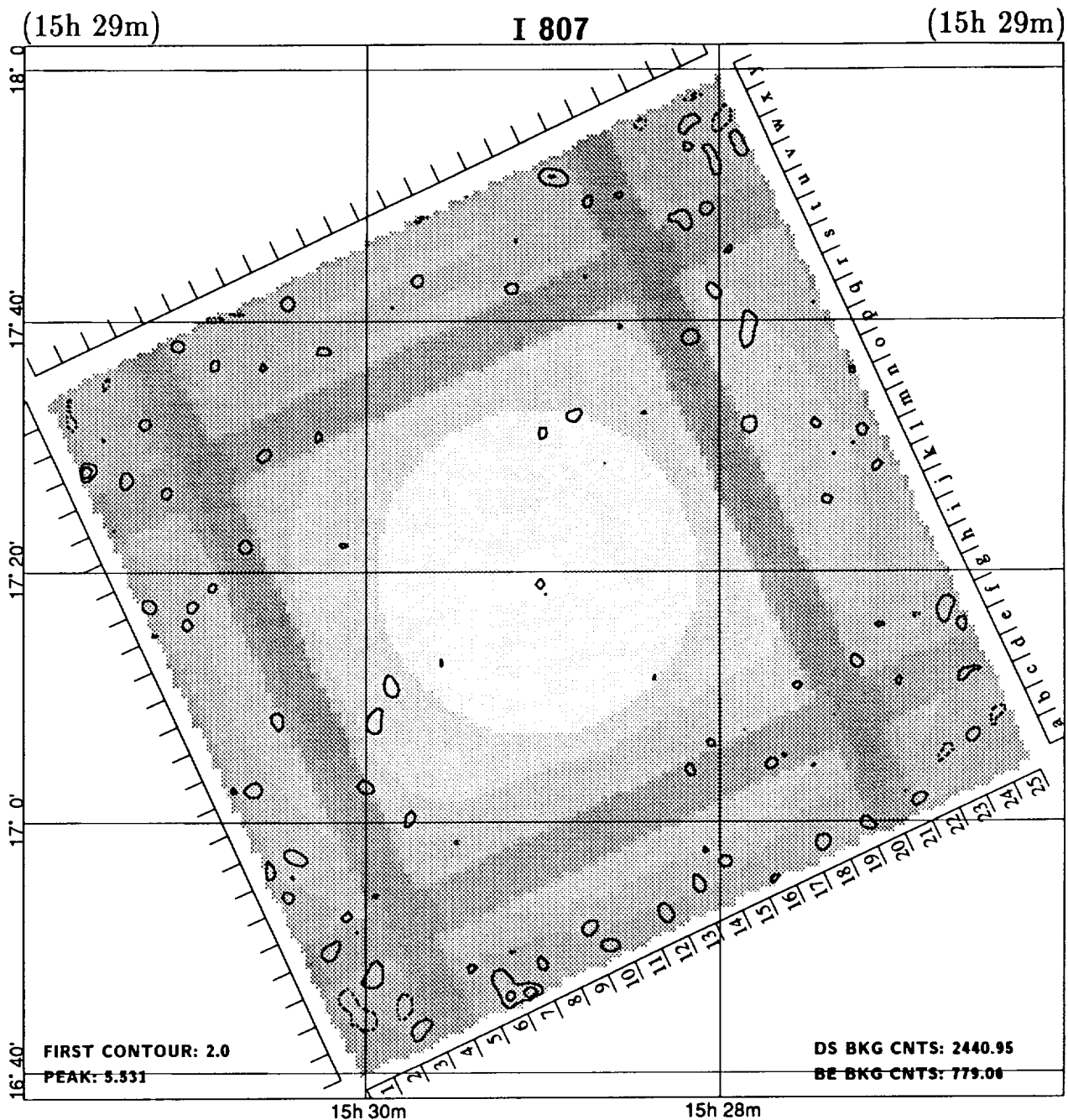
## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}29^{\text{m}}00.0^{\text{s}}$   $16^{\circ}14'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}18.4^{\text{s}}$   $16^{\circ}04'50''$  (J2000)  
 $l: 24.70$   $b: 51.42$

DATE: 1979/ 28 - 1979/ 28  
 LIVETIME: 2354.4s  
 ROLL ANGLE:  $-115.1^{\circ}$

NH:  $3.0\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3440	1L	15 27 25.6	16 21 22	50	0.0340	0.0074	35.4	8.6	4.5	1.0	0	23.5	S	

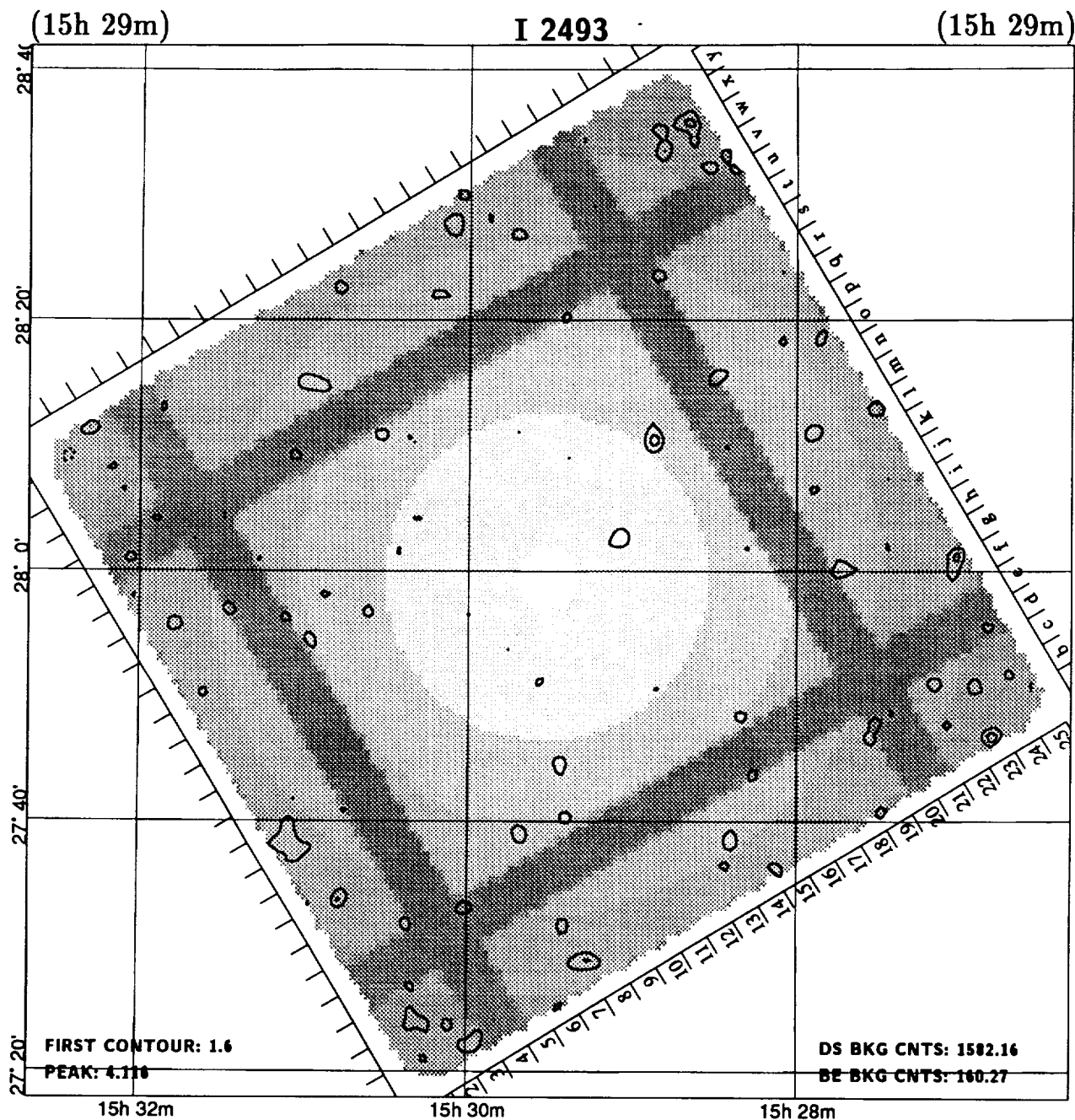


**N. POLAR SPUR: SOFT X-RAY BACKGROUND**

FIELD CENTER:  $15^{\text{h}}29^{\text{m}}00.0^{\text{s}}$   $17^{\circ}19'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}17.3^{\text{s}}$   $17^{\circ}09'50''$  (J2000)  
 $l$ : 26.31  $b$ : 51.84

DATE: 1979/ 28 - 1979/ 28  
 LIVETIME: 1978.0s  
 ROLL ANGLE: -115.1°

NH: 3.5E+20  
 REF/ID:  
 FIELD FLAGS:



1529+28H: SURVEY OF NEARBY RADIO PULSARS

FIELD CENTER:  $15^{\text{h}}29^{\text{m}}30.0^{\text{s}}$   $27^{\circ}59'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}35.6^{\text{s}}$   $27^{\circ}49'51''$  (J2000)  
 $l$ : 43.56  $b$ : 54.63

DATE: 1979/ 30 - 1979/ 30  
 LIVETIME: 1282.1s  
 ROLL ANGLE:  $-121.1^{\circ}$

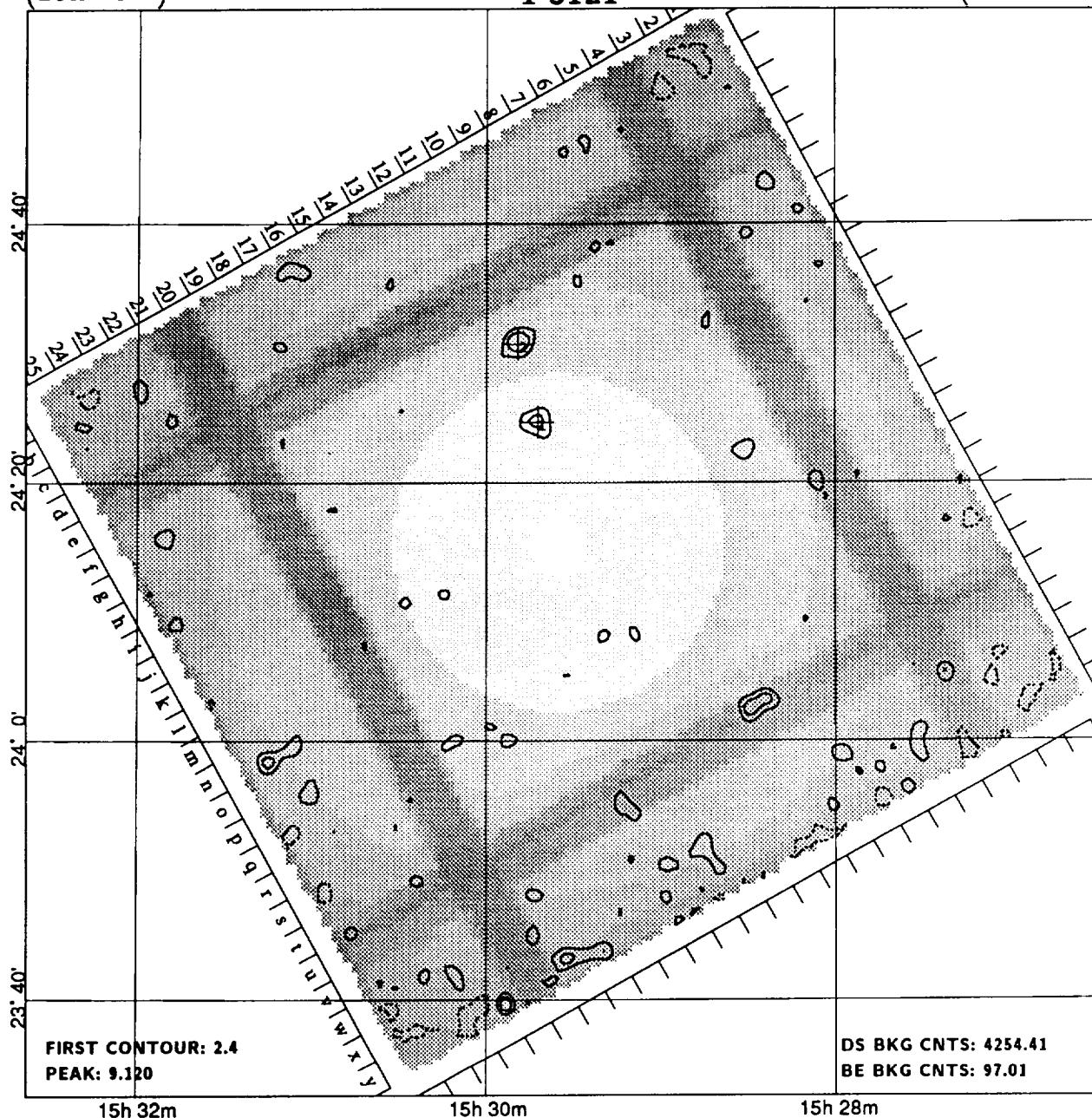
NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



(15h 29m)

I 3121

(15h 29m)



## 3C 321: OPTICAL OBJECTS IN THE LOBES OF RADIO GALAXIES

FIELD CENTER:  $15^{\text{h}}29^{\text{m}}34.0^{\text{s}}$   $24^{\circ}14'29''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}43.9^{\text{s}}$   $24^{\circ}04'22''$  (J2000)  
 $l: 37.26$   $b: 53.88$

DATE: 1979/201 - 1979/201  
 LIVETIME: 3447.5s  
 ROLL ANGLE:  $61.1^{\circ}$

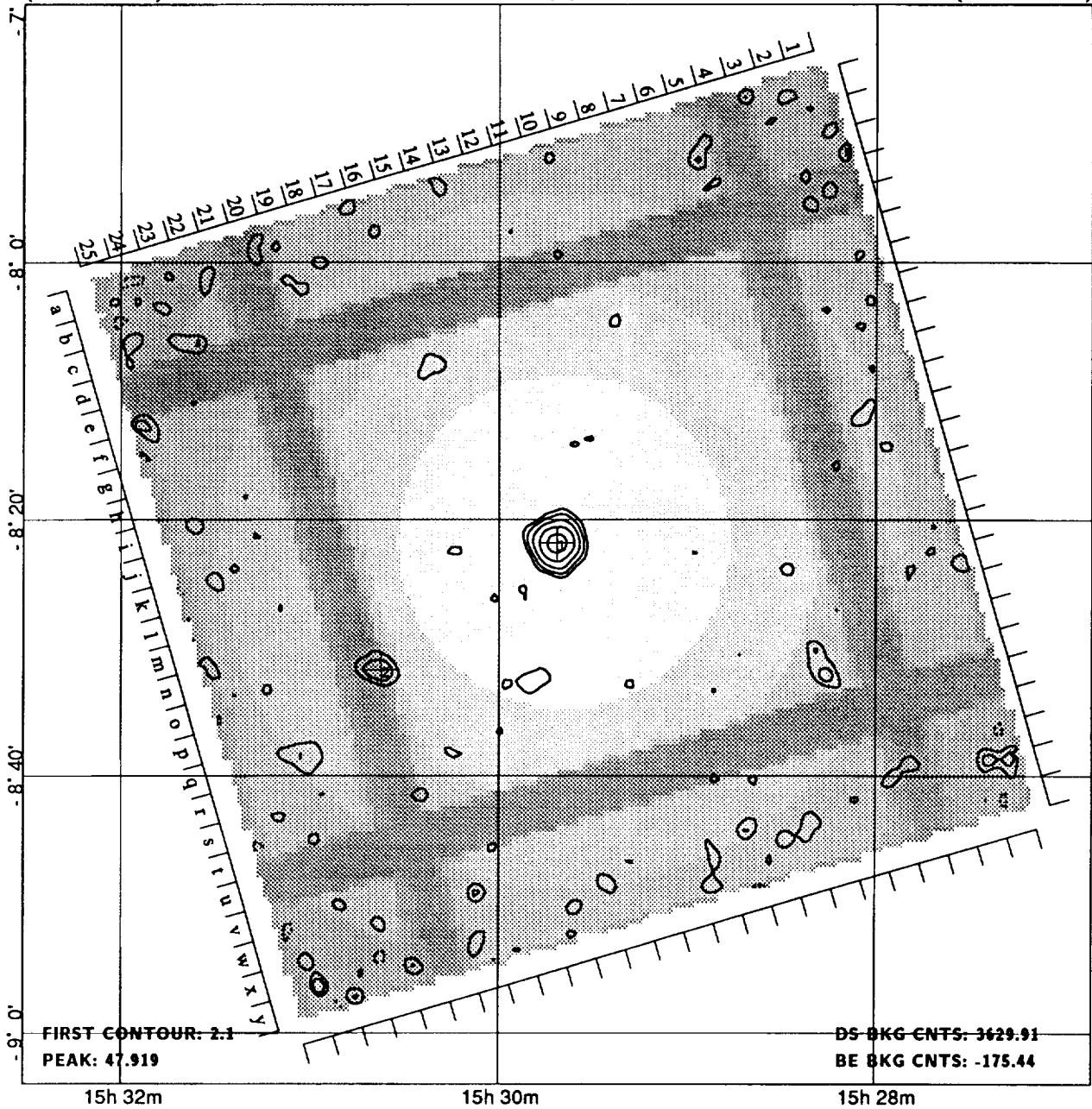
NH:  $4.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3448	1	15 29 42.3	24 24 40	45	0.0089	0.0024	20.6	9.4	3.8	0.7	0	10.4	H	
3449	2	15 29 49.2	24 30 38	51	0.0111	0.0028	22.2	9.8	3.9	0.7	0	16.7		

(15h 29m)

I 9027

(15h 29m)



THE FK COMAE STARS: UZ Lib

FIELD CENTER:  $15^h 29^m 41.0^s$   $-08^\circ 21' 57''$  (B1950)  
 $15^h 32^m 22.6^s$   $-08^\circ 32' 04''$  (J2000)  
 $l: 356.22$   $b: 37.17$

DATE: 1980/217 - 1980/217  
 LIVETIME: 2941.4s  
 ROLL ANGLE:  $73.8^\circ$

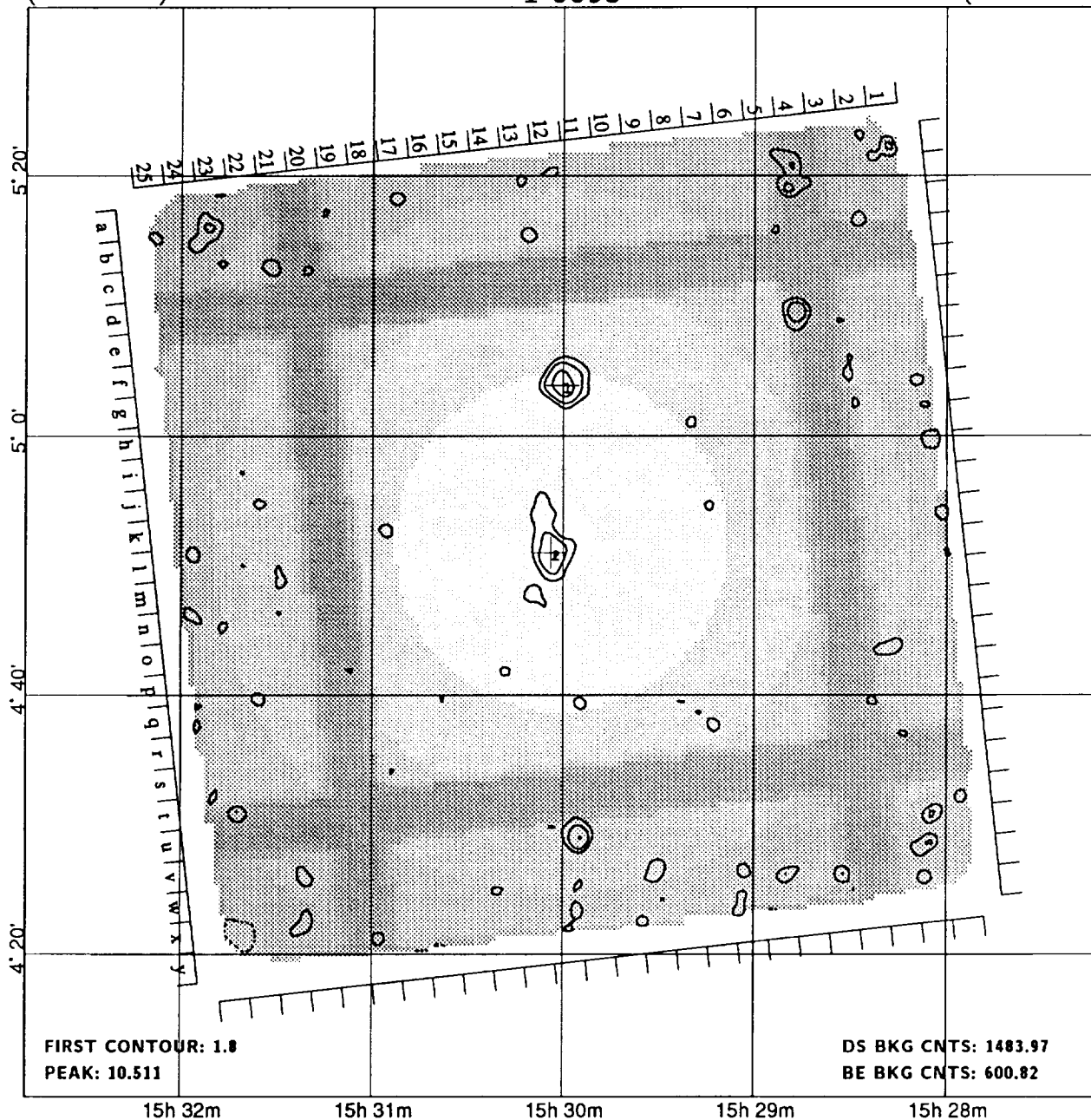
NH:  $8.7E+20$   
 REF/ID: S  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3447	1	15 29 41.4	-08 21 48	31	0.0892	0.0065	195.6	8.4	13.7	1.2	0	0.2	H	
3453	2	15 30 37.6	-08 31 46	54	*0.0136	0.0032	22.0	5.0	4.2	0.8	1008	17.1		SY

(15h 30m)

I 6693

(15h 30m)



## MKW 9: CD GALAXIES IN POOR CLUSTERS

FIELD CENTER:  $15^{\text{h}}30^{\text{m}}00.0^{\text{s}}$   $04^{\circ}50'59''$  (B1950)  
 $15^{\text{h}}32^{\text{m}}29.3^{\text{s}}$   $04^{\circ}40'54''$  (J2000)  
 $\ell$ : 9.88  $b$ : 45.57

DATE: 1980/239 - 1980/239  
 LIVETIME: 1202.5s  
 ROLL ANGLE:  $83.8^{\circ}$

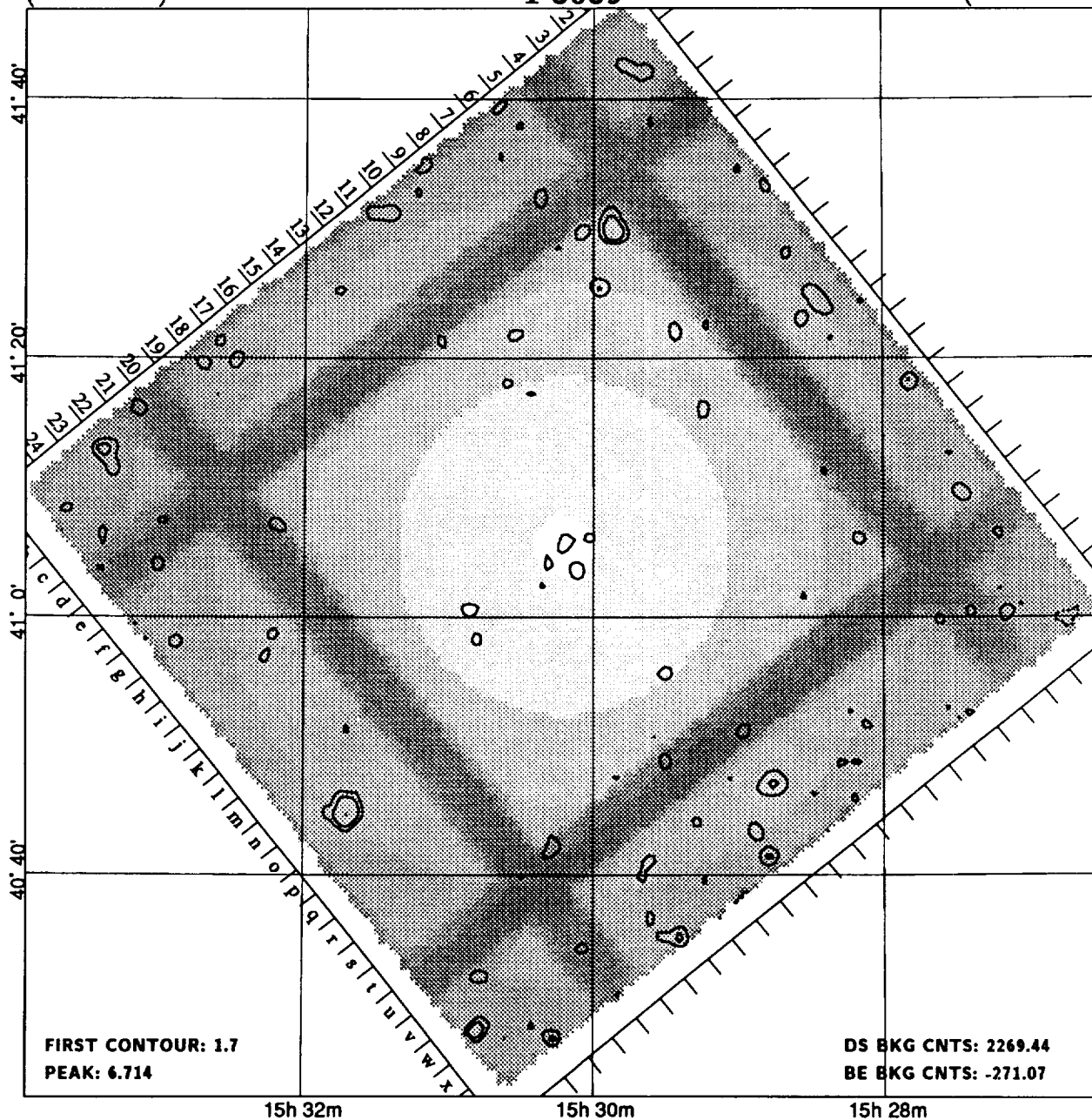
NH:  $4.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3450	1	15 30 00.1	05 03 55	41	0.0504	0.0085	38.7	4.3	5.9	1.1	0	12.7	H	AGN
3451	2	15 30 03.8	04 51 01	36	0.0327	0.0066	29.2	5.8	4.9	1.4	0	1.3	H	CLG

(15h 30m)

I 3089

(15h 30m)



RADIO SOURCES WITH STEEP SPECTRA: 1530+41

FIELD CENTER:  $15^{\text{h}}30^{\text{m}}12.0^{\text{s}}$   $41^{\circ}04'59''$  (B1950)  
 $15^{\text{h}}31^{\text{m}}59.5^{\text{s}}$   $40^{\circ}54'53''$  (J2000)  
 $l: 66.19$   $b: 54.37$

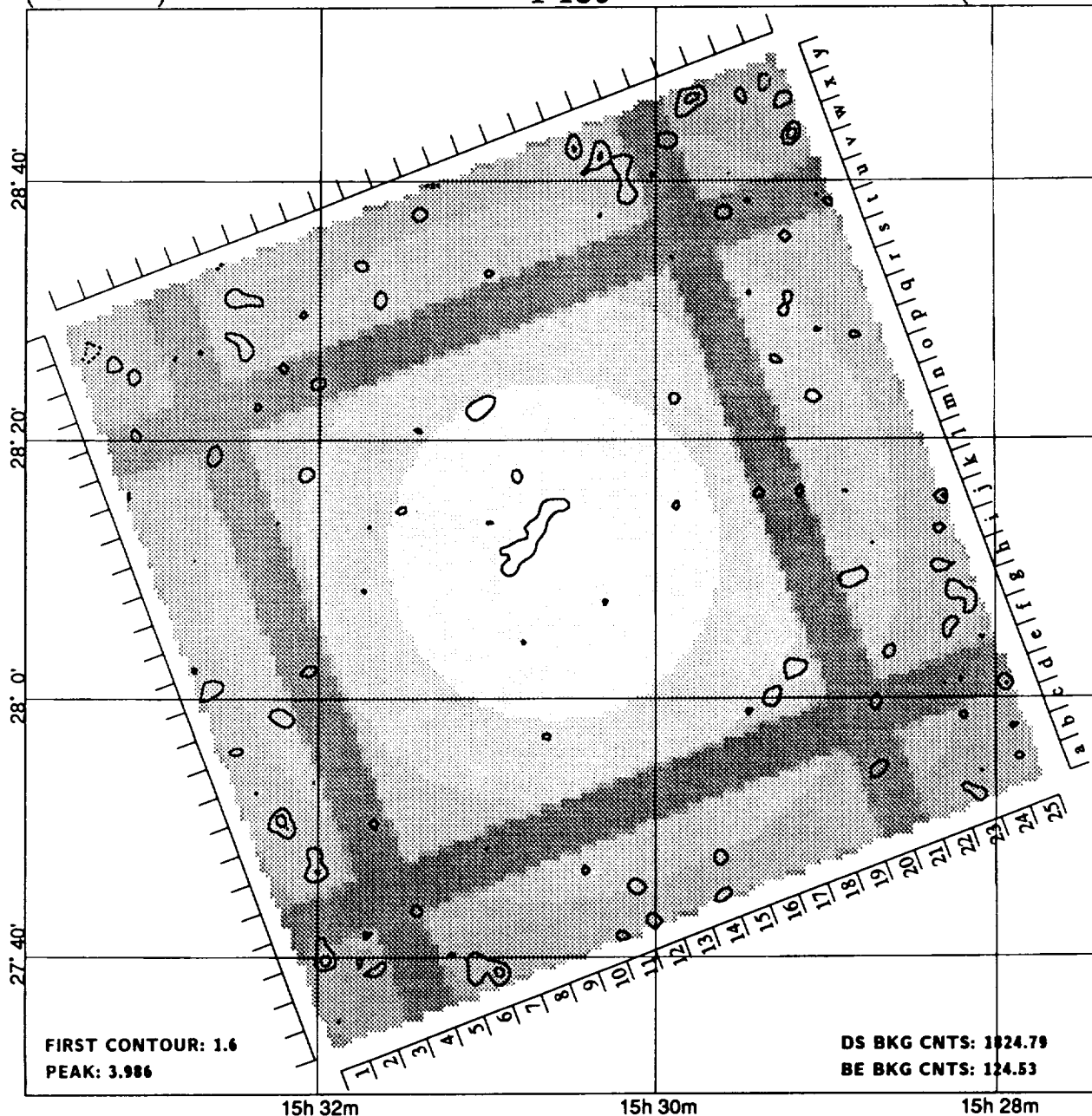
DATE: 1979/191 - 1979/191  
LIVETIME: 1839.0s  
ROLL ANGLE:  $51.2^{\circ}$

NH:  $2.1\text{E}+20$   
REF/ID: I  
FIELD FLAGS:

(15h 30m)

I 136

(15h 30m)



## A2089 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $15^{\text{h}}30^{\text{m}}33.6^{\text{s}}$   $28^{\circ}11'23''$  (B1950)  
 $15^{\text{h}}32^{\text{m}}38.9^{\text{s}}$   $28^{\circ}01'19''$  (J2000)  
 $l: 43.95$   $b: 54.43$

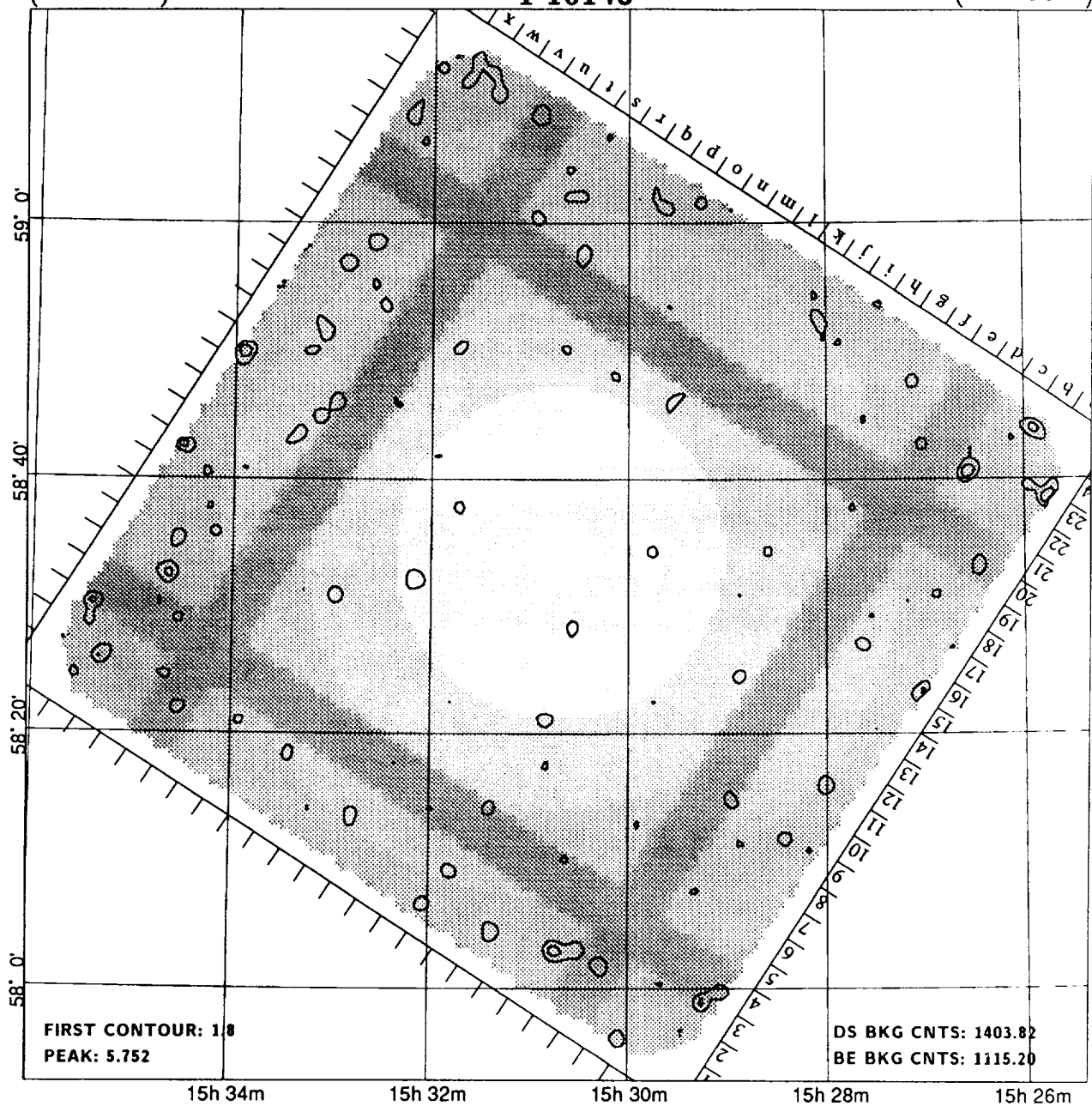
DATE: 1979/ 30 - 1979/ 30  
 LIVETIME: 1478.7s  
 ROLL ANGLE:  $-110.7^{\circ}$

NH:  $2.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 30m)

I 10148

(15h 30m)

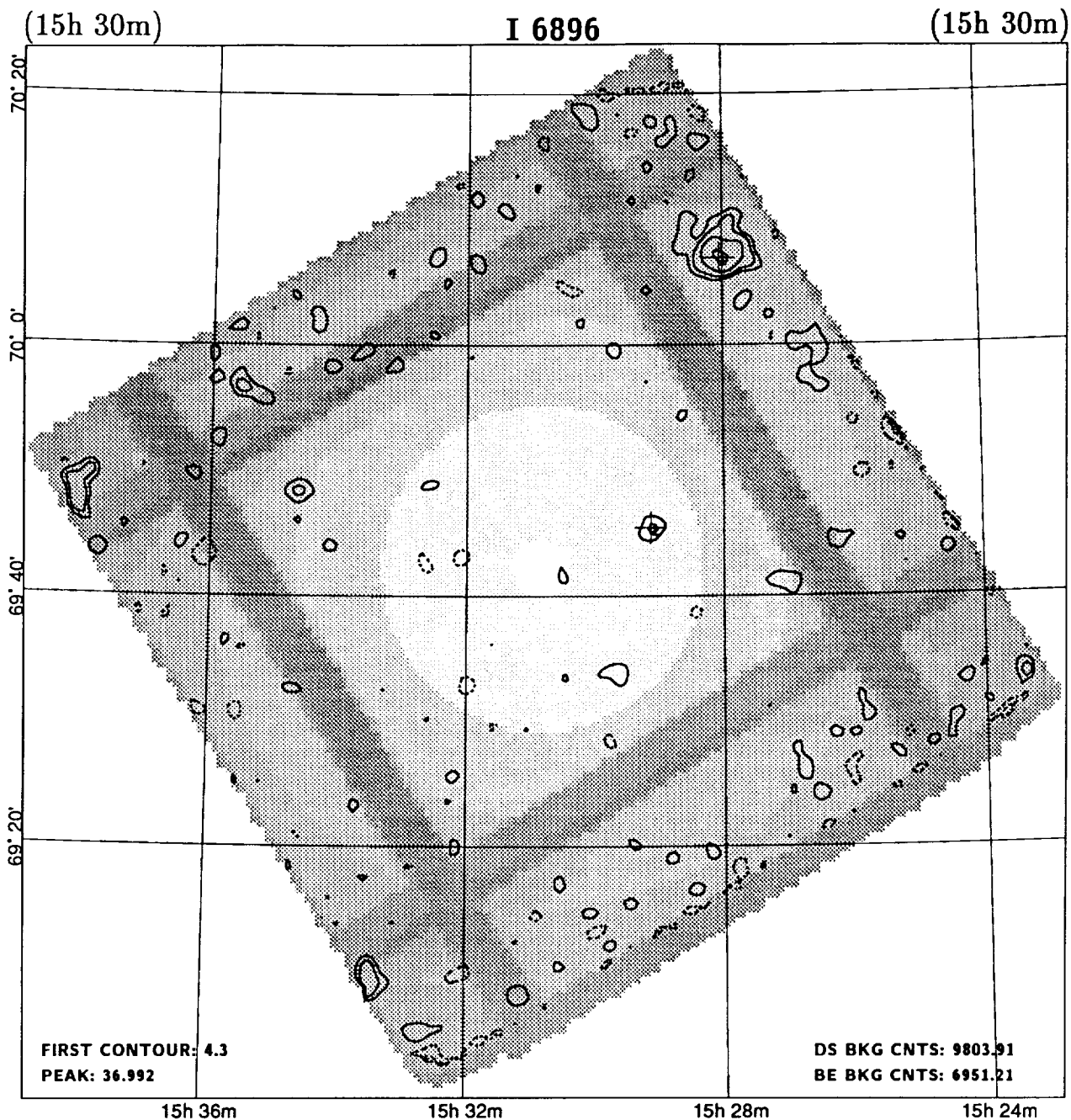


Offset pointing - between MKN 290/MKN 289

FIELD CENTER:  $15^h 30^m 42.0^s$   $58^\circ 34' 47''$  (B1950)  
 $15^h 31^m 48.9^s$   $58^\circ 24' 42''$  (J2000)  
 $l: 92.55$   $b: 48.16$

DATE: 1980/355 - 1980/355  
 LIVETIME: 1137.6s  
 ROLL ANGLE:  $-147.2^\circ$

NH:  $1.8E+20$   
 REF/ID:  
 FIELD FLAGS:



A2098, CLUSTER LUMINOSITIES @ Z=0.25.

FIELD CENTER:  $15^{\text{h}}30^{\text{m}}48.0^{\text{s}}$   $69^{\circ}41'59''$  (B1950)  
 $15^{\text{h}}30^{\text{m}}58.7^{\text{s}}$   $69^{\circ}31'52''$  (J2000)  
 $l: 105.44$   $b: 41.76$

DATE: 1980/103 - 1980/103  
 LIVETIME: 8229.7s

NH:  $2.7\text{E}+20$   
 REF/ID: CLG  
 FIELD FLAGS:

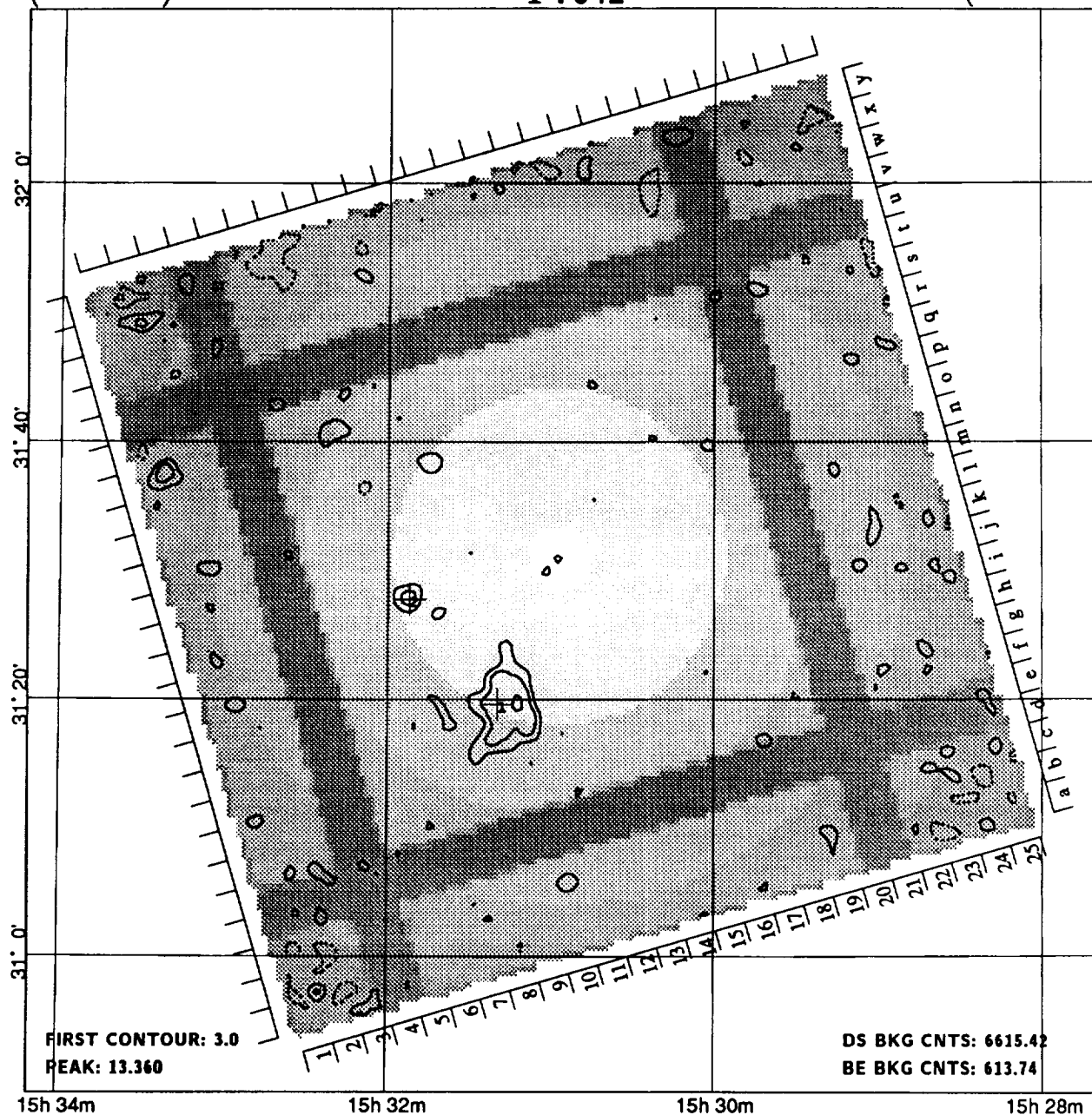
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3442	1	15 28 02.9	70 06 53	50	0.0298	0.0035	92.1	26.9	8.4	1.7	0	29.1	H	
3445	2	15 29 08.0	69 45 26	42	0.0058	0.0016	32.1	43.9	3.7	0.6	0	9.1		



(15h 30m)

I 7642

(15h 30m)

FIELD CENTER: 15<sup>h</sup>30<sup>m</sup>54.7<sup>s</sup> 31°31'36" (B1950)15<sup>h</sup>32<sup>m</sup>55.8<sup>s</sup> 31°21'33" (J2000) $l$ : 49.69  $b$ : 54.71

DATE: 1980/ 36 - 1980/ 36

LIVETIME: 5360.7s

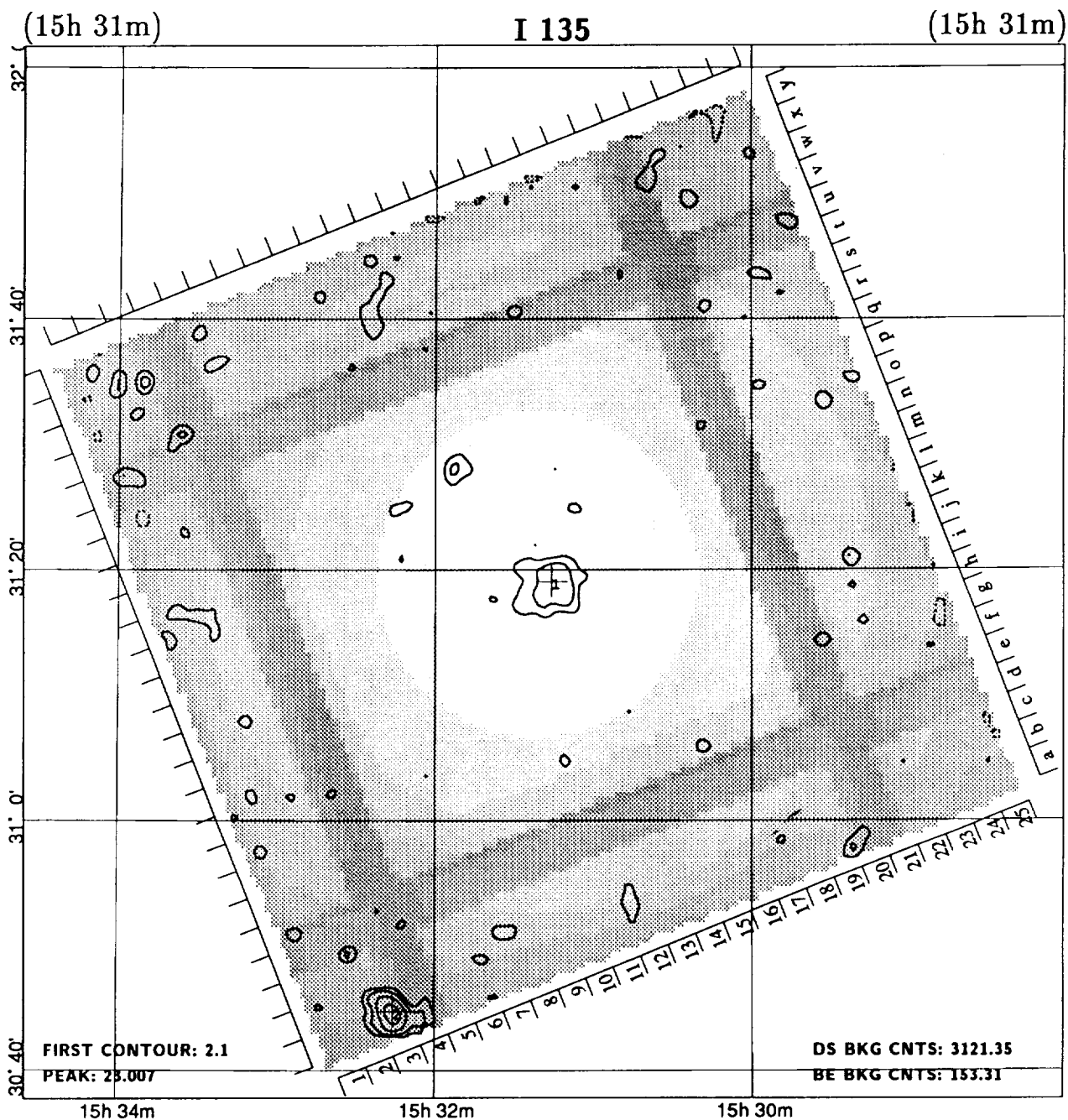
ROLL ANGLE: -106.3°

NH: 2.2E+20

REF/ID:

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3456	1	15 31 19.5	31 19 35	42	0.0120	0.0022	40.7	16.3	5.4	3.1	0	13.8	AH	
3457	2	15 31 52.1	31 27 49	43	0.0077	0.0019	26.2	15.8	4.0	0.6	0	12.7		



**A2092 CLUSTER SURFACE BRIGHTNESS**

FIELD CENTER:  $15^{\text{h}}31^{\text{m}}19.2^{\text{s}}$   $31^{\circ}19'47''$  (B1950)  
 $15^{\text{h}}33^{\text{m}}20.5^{\text{s}}$   $31^{\circ}09'45''$  (J2000)  
 $l: 49.36$   $b: 54.61$

DATE: 1979/ 28 - 1979/ 28  
 LIVETIME: 2529.3s  
 ROLL ANGLE:  $-111.6^{\circ}$

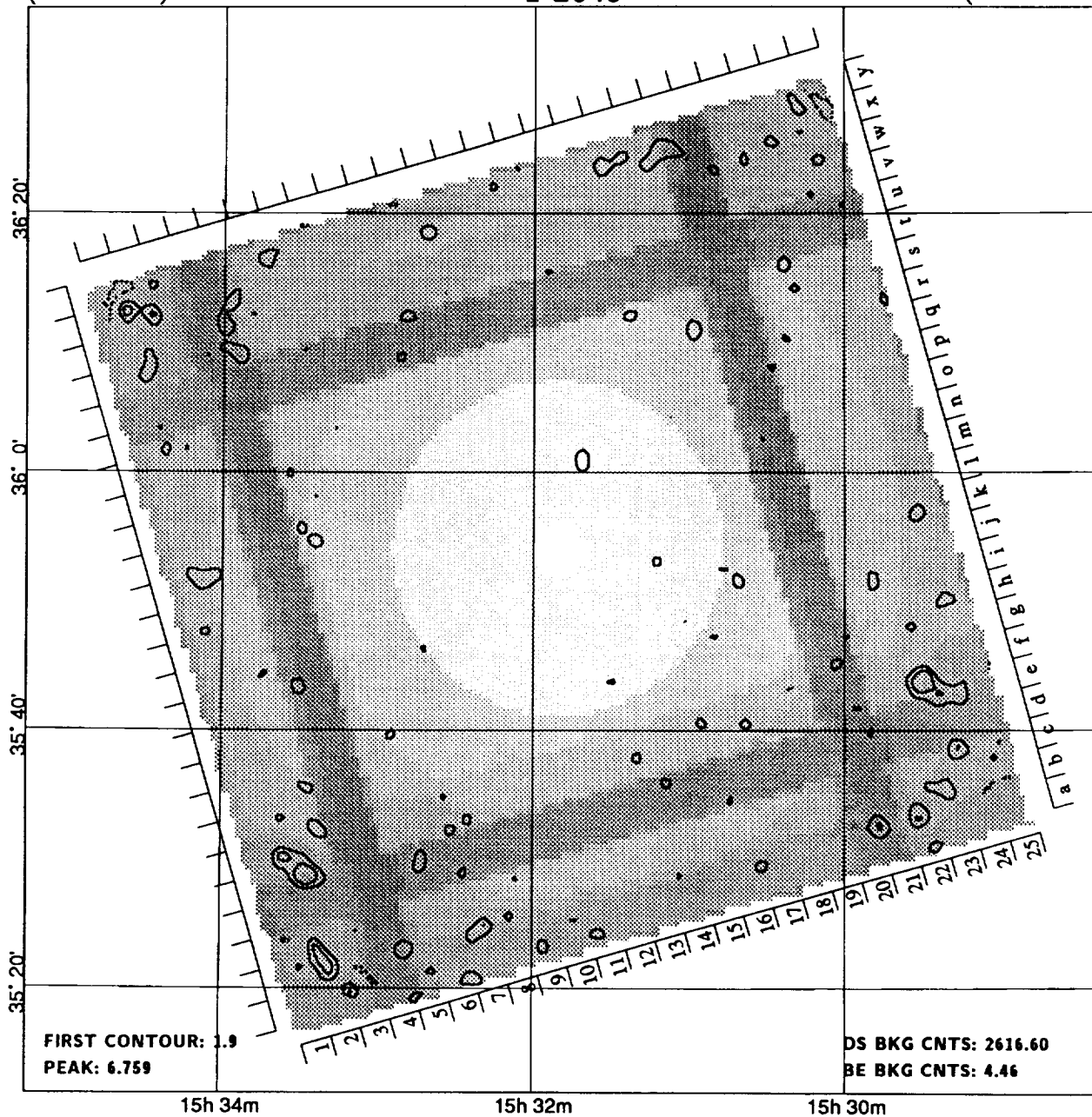
NH:  $2.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3456	1	15 31 15.6	31 19 04	36	0.0212	0.0037	39.9	9.1	5.7	2.3	0	0.9	AH	
3458	2	15 32 15.7	30 44 43	51	*0.0449	0.0098	24.7	4.3	4.6	1.2	804	37.1	H	

(15h 31m)

I 2649

(15h 31m)



SEYFERT GALAXY SURVEY: 4C 35.37

FIELD CENTER:  $15^{\text{h}}31^{\text{m}}48.0^{\text{s}}$   $35^{\circ}53'59''$  (B1950)  
 $15^{\text{h}}33^{\text{m}}43.1^{\text{s}}$   $35^{\circ}43'59''$  (J2000)  
 $l: 57.25$   $b: 54.59$

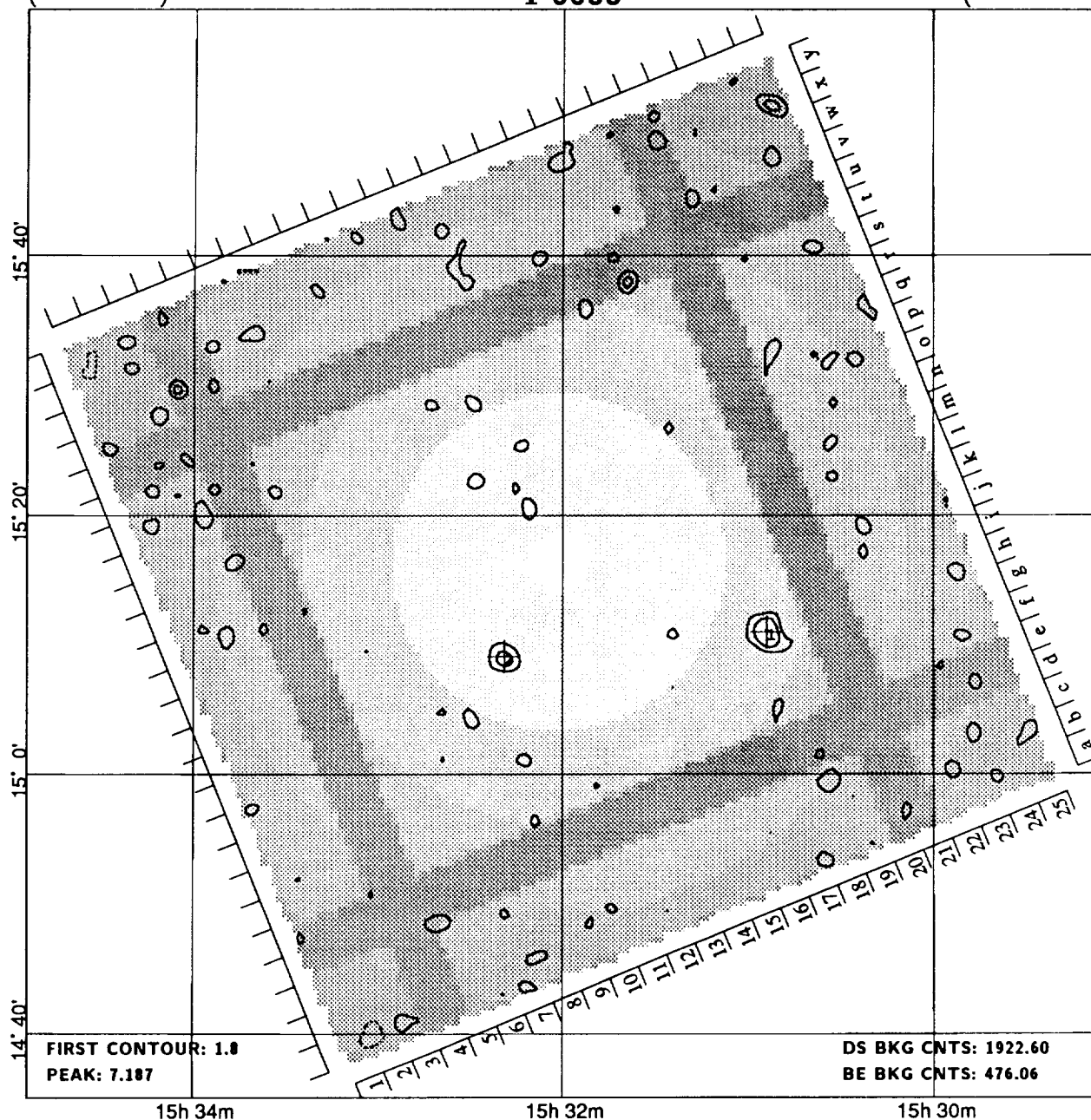
DATE: 1979/ 28 - 1979/ 28  
 LIVETIME: 2120.3s  
 ROLL ANGLE:  $-106.1^{\circ}$

NH:  $1.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 32m)

I 6688

(15h 32m)



## GROUPS OF GALAXIES: TG 98

FIELD CENTER:  $15^{\text{h}}32^{\text{m}}00.0^{\text{s}}$   $15^{\circ}16'59''$  (B1950)  
 $15^{\text{h}}34^{\text{m}}19.2^{\text{s}}$   $15^{\circ}07'00''$  (J2000)  
 $l: 23.77$   $b: 50.36$

DATE: 1980/ 21 - 1980/ 21  
 LIVETIME: 1558.0s  
 ROLL ANGLE:  $-112.1^{\circ}$

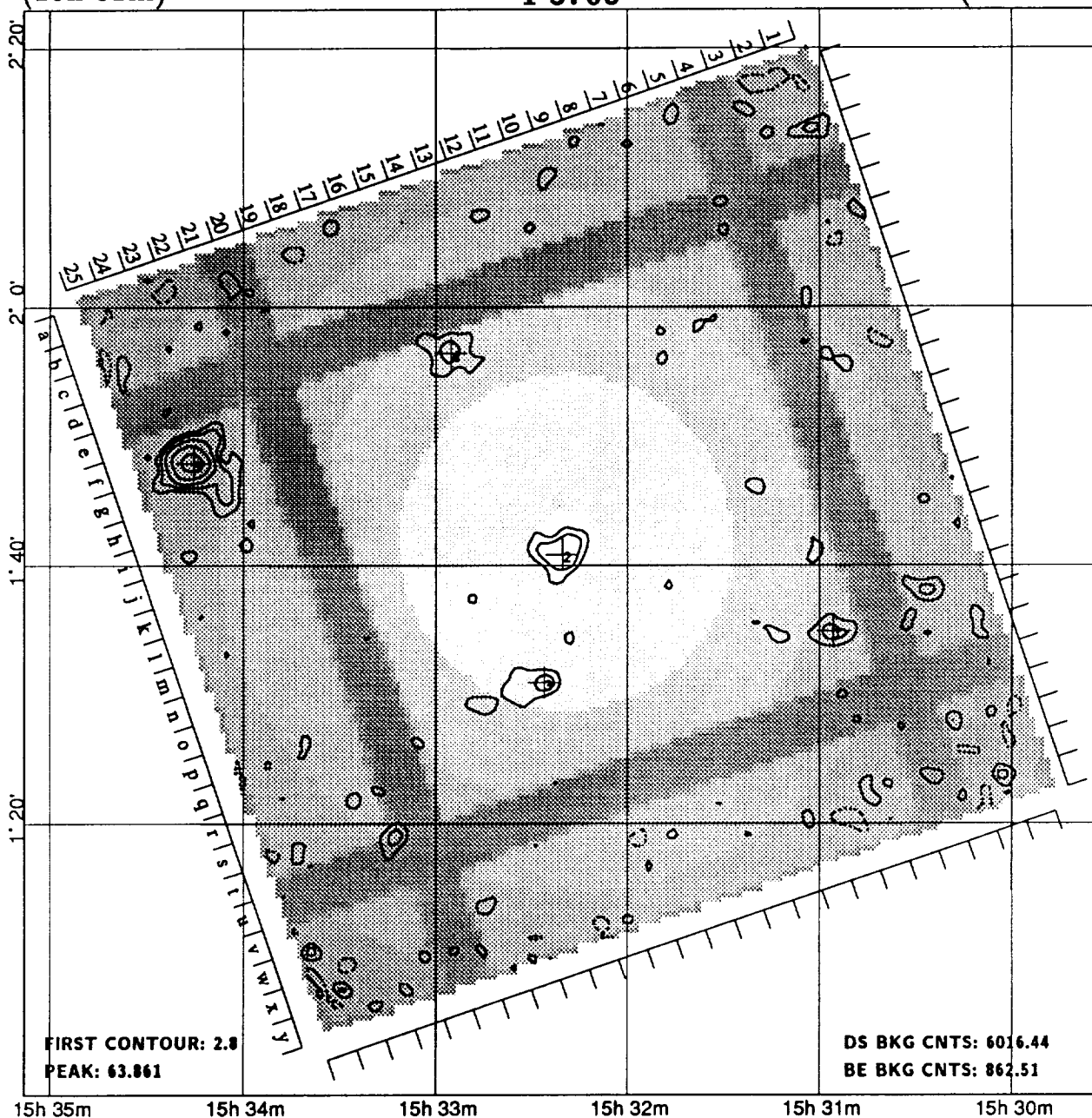
NH:  $3.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3454	1	15 30 53.7	15 10 59	53	0.0258	0.0060	22.3	4.7	4.3	0.9	0	16.7	AH	AGN
3459	2	15 32 19.0	15 09 07	46	0.0161	0.0045	17.1	5.9	3.6	0.6	0	9.3		

(15h 32m)

I 5708

(15h 32m)



## BL LAC OBJECT

FIELD CENTER:  $15^h 32^m 20.0^s$   $01^\circ 41' 01''$  (B1950)  
 $15^h 34^m 52.2^s$   $01^\circ 31' 04''$  (J2000)  
 $l: 6.77$   $b: 43.23$

DATE: 1980/214 - 1980/214  
 LIVETIME: 4875.3s  
 ROLL ANGLE:  $71.2^\circ$

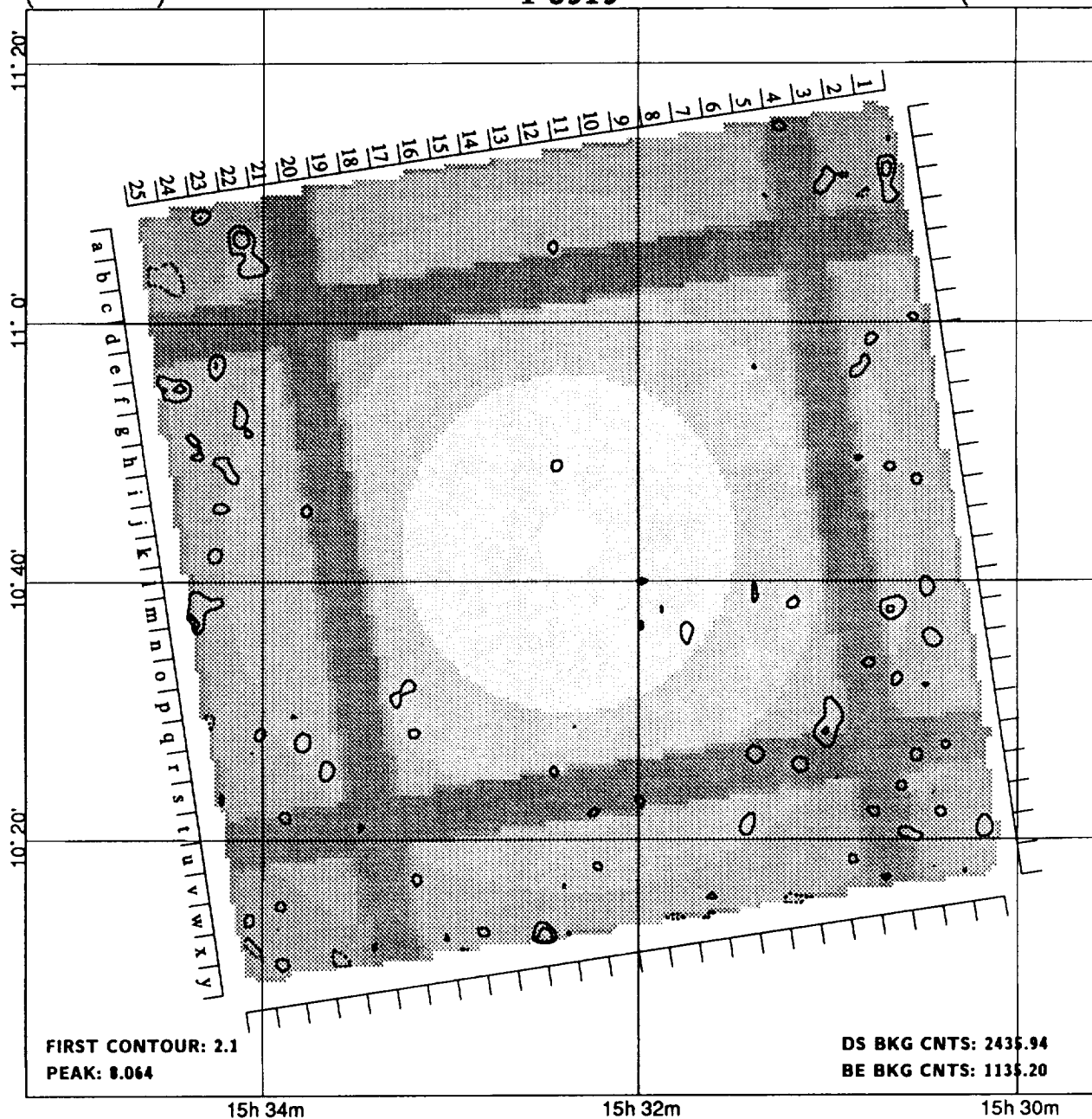
NH:  $4.6E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3455	1	15 30 55.6	01 34 56	56	0.0088	0.0024	20.6	10.4	3.7	0.8	300	22.0	H	
3460	2	15 32 20.4	01 40 49	35	0.0137	0.0023	49.7	17.3	6.1	1.3	0	0.2	H	
3461	3	15 32 26.1	01 30 55	43	0.0074	0.0020	23.5	15.5	3.8	1.3	0	10.3	H	
3463	4	15 32 55.3	01 56 26	55	0.0080	0.0021	21.7	11.3	3.8	1.3	400	17.8	H	
3471	5	15 34 15.4	01 47 55	48	0.0701	0.0067	120.9	12.1	10.5	1.4	0	29.8	H	

(15h 32m)

I 8919

(15h 32m)

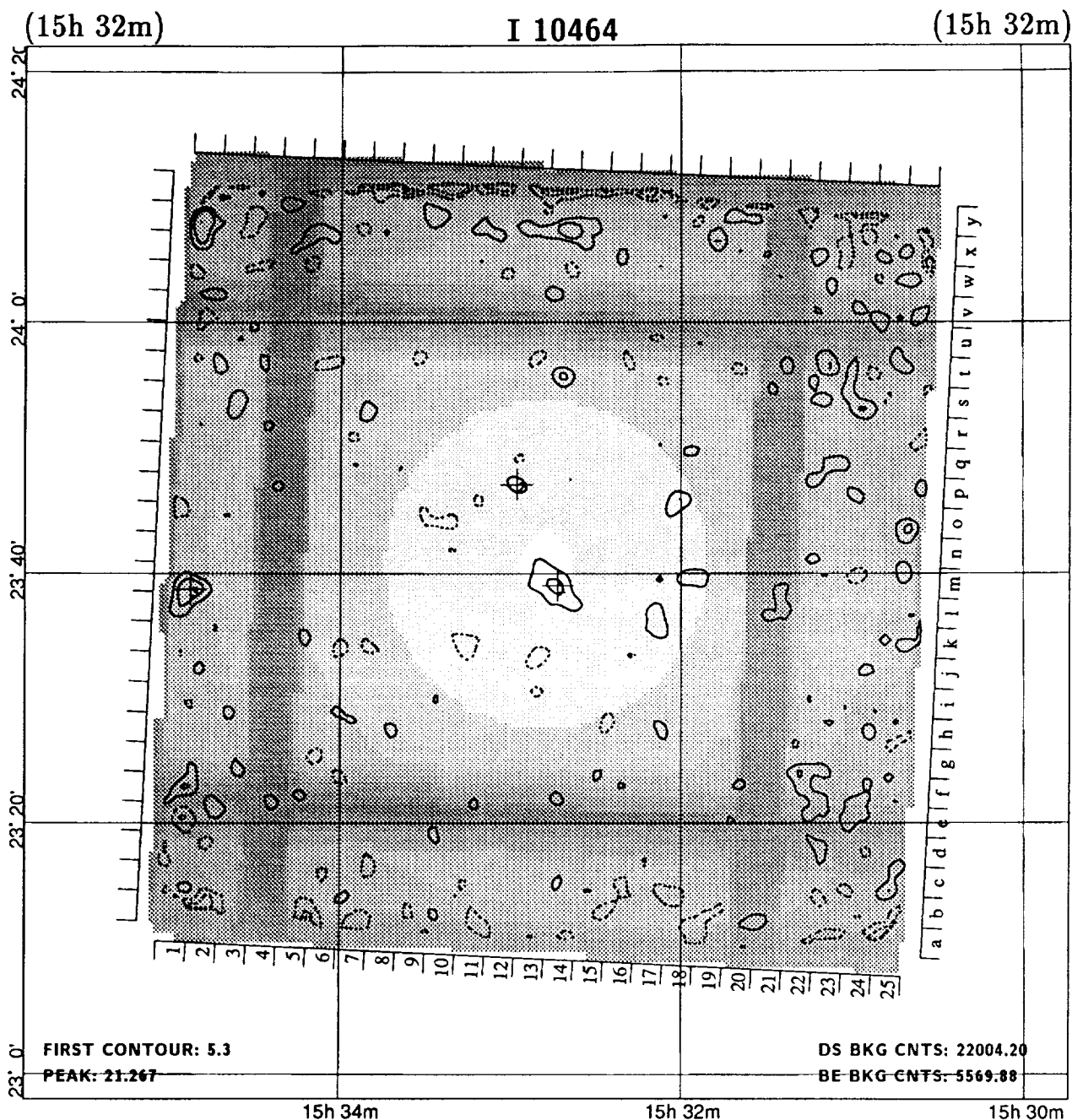
**DELTA SER, EMISSION FROM DELTA SCUTI STARS**

**FIELD CENTER:**  $15^{\text{h}}32^{\text{m}}24.6^{\text{s}}$   $10^{\circ}42'14''$  (B1950)  
 $15^{\text{h}}34^{\text{m}}48.3^{\text{s}}$   $10^{\circ}32'17''$  (J2000)  
 $\ell$ : 17.59  $b$ : 48.19

**DATE:** 1980/238 - 1980/238  
**LIVETIME:** 1973.9s  
**ROLL ANGLE:** 81.6°

**NH:** 3.2E+20  
**REF/ID:**  
**FIELD FLAGS:** L





I4553, SPIRAL GALAXIES W/ RADIO SOURCES

FIELD CENTER:  $15^{\text{h}}32^{\text{m}}47.0^{\text{s}}$   $23^{\circ}40'05''$  (B1950)  
 $15^{\text{h}}34^{\text{m}}57.3^{\text{s}}$   $23^{\circ}30'09''$  (J2000)  
 $l: 36.63$   $b: 53.03$

DATE: 1981/ 63 - 1981/ 63

NH:  $4.2\text{E}+20$

LIVETIME: 17830.6s

REF/ID:

ROLL ANGLE:  $-87.3^{\circ}$

FIELD FLAGS:

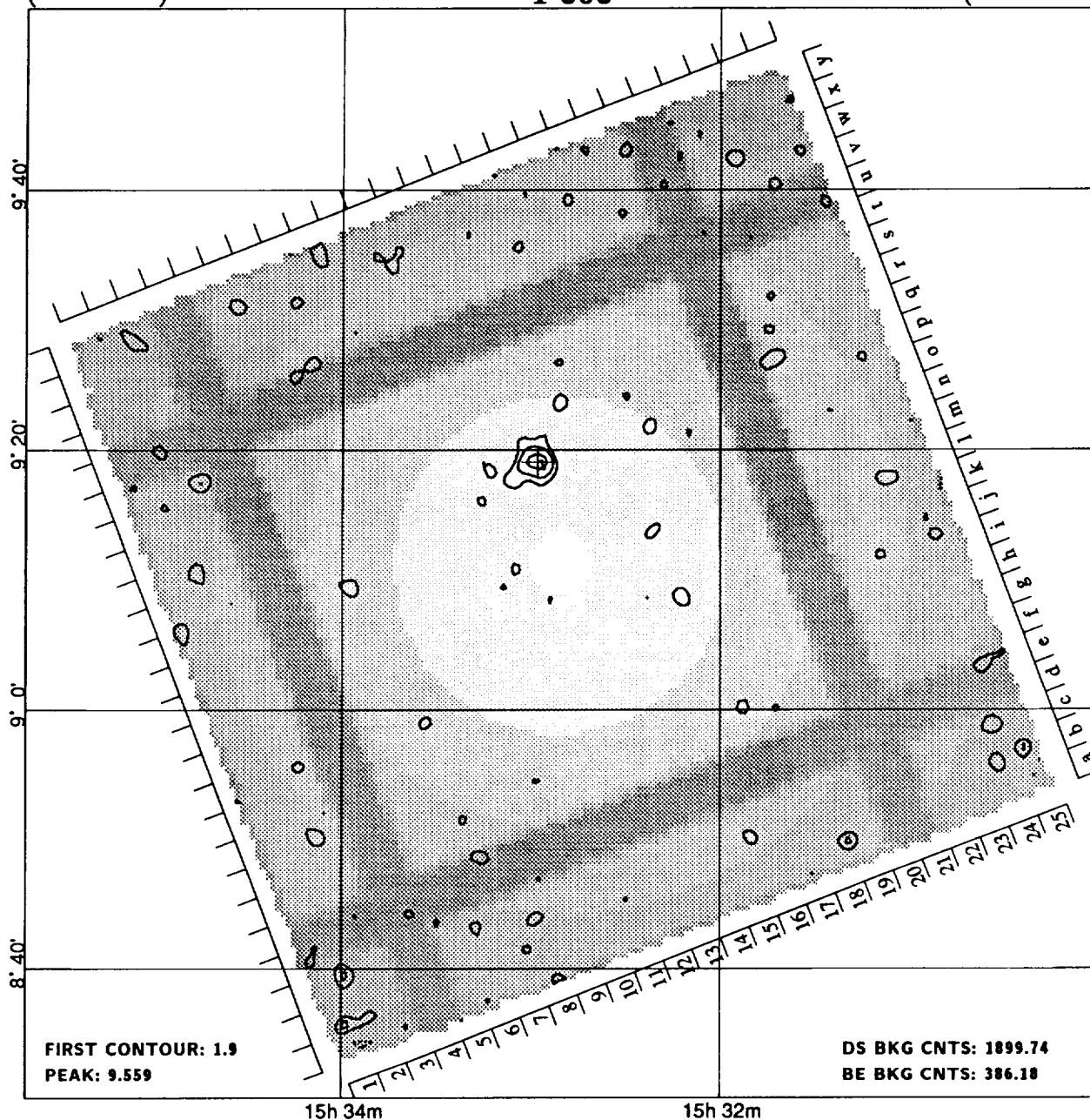
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3462	1	15 32 43.5	23 39 02	35	0.00403	0.00088	53.2	80.8	4.6	1.2	0	1.1	H G
3465	2L	15 32 58.0	23 47 06	42	0.00364	0.00096	45.5	49.5	3.7	0.6	0	7.2	
3475	3	15 34 52.5	23 38 45	56	0.0048	0.0013	31.8	40.2	3.7	1.0	500	28.7	



(15h 32m)

I 808

(15h 32m)



FIELD CENTER:  $15^{\text{h}}32^{\text{m}}50.0^{\text{s}}$   $09^{\circ}11'59''$  (B1950)  
 $15^{\text{h}}35^{\text{m}}15.1^{\text{s}}$   $09^{\circ}02'04''$  (J2000)  
 $l: 15.73$   $b: 47.34$

DATE: 1979/ 27 - 1979/ 27  
 LIVETIME: 1539.4s  
 ROLL ANGLE:  $-111.1^{\circ}$

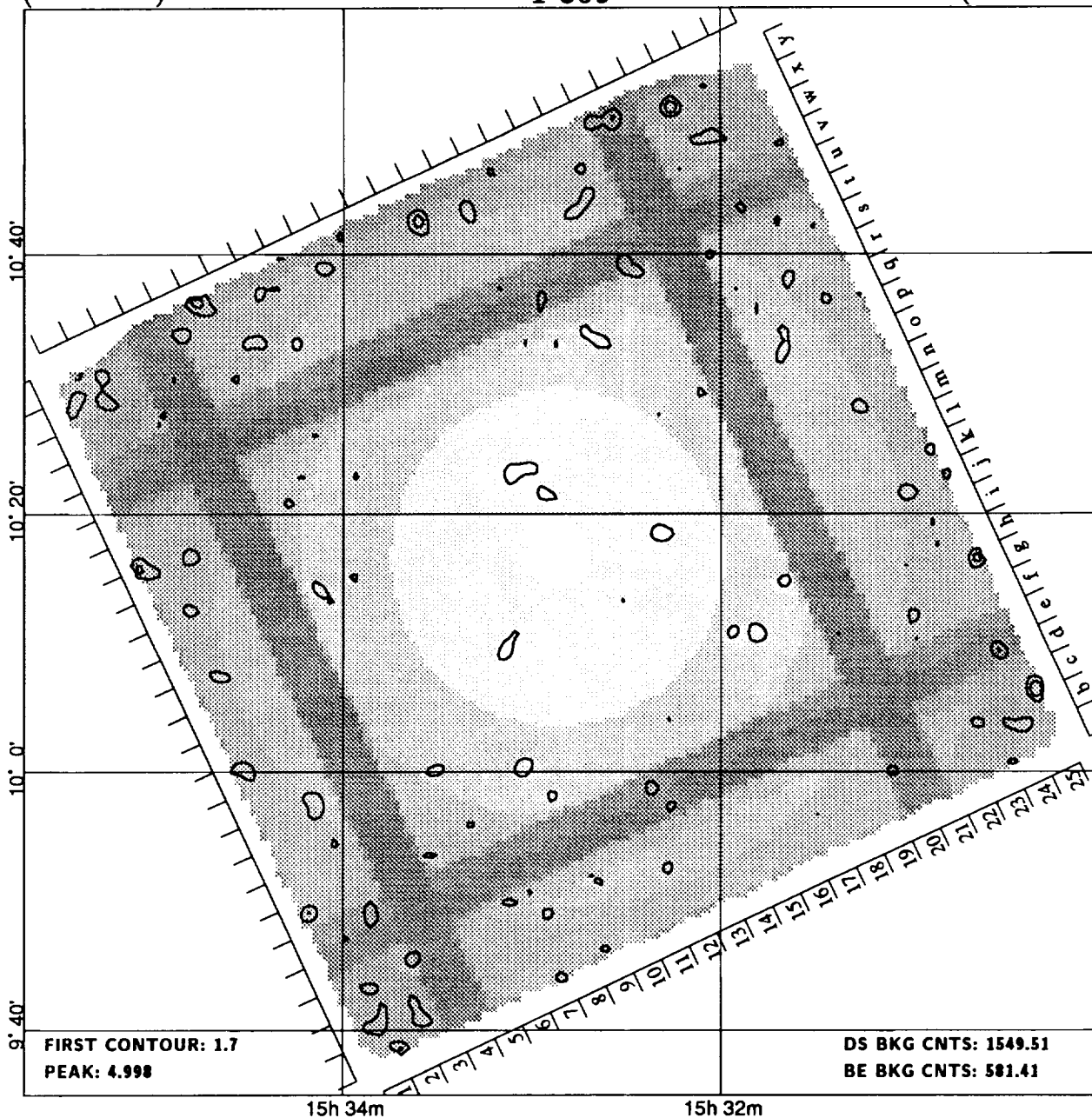
NH:  $3.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3464	1	15 32 57.9	09 19 03	41	0.0335	0.0061	35.3	5.7	5.5	1.1	0	7.8	H	S

(15h 32m)

I 809

(15h 32m)

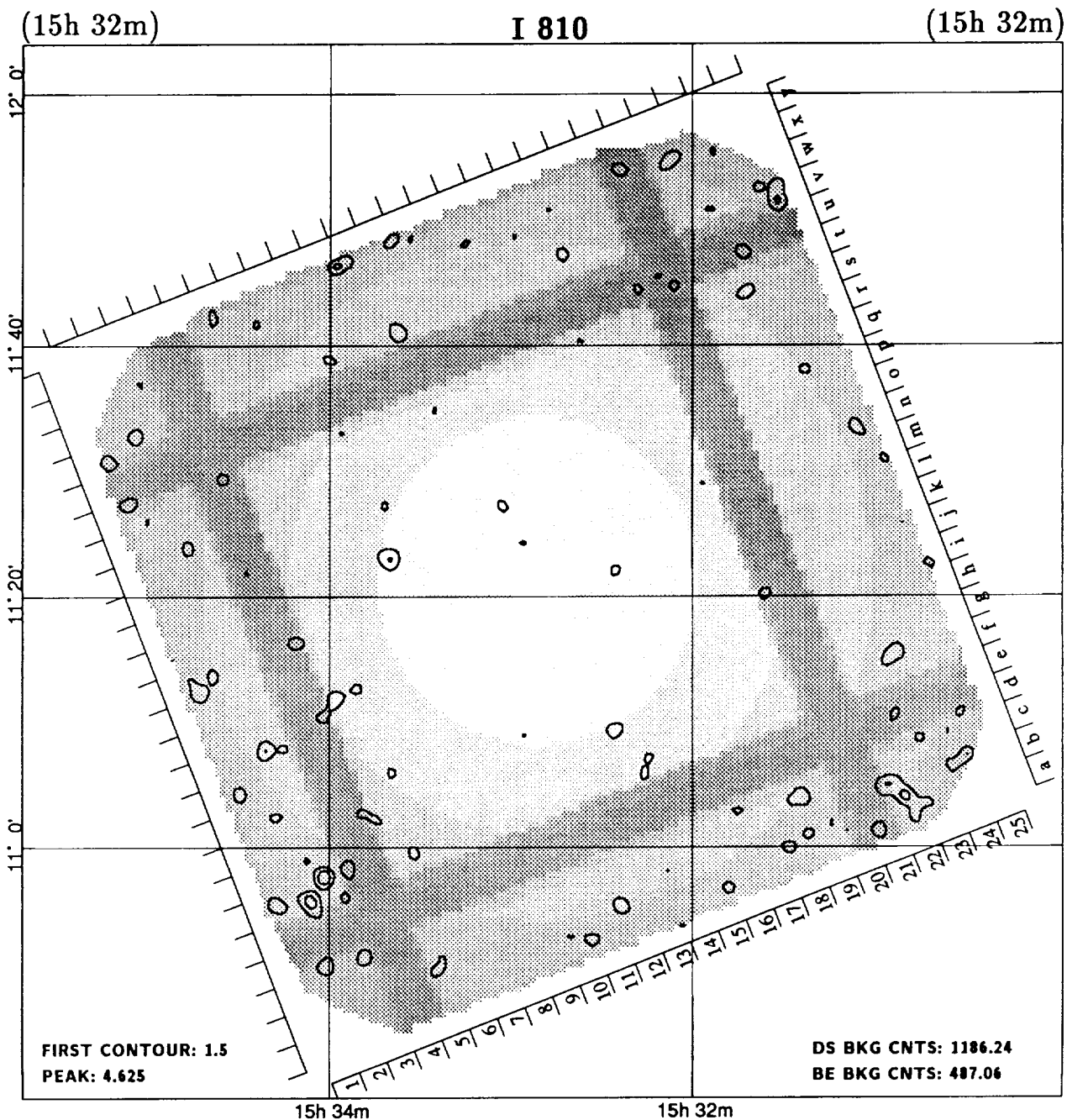


N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}32^{\text{m}}50.0^{\text{s}}$   $10^{\circ}16'59''$  (B1950)  
 $15^{\text{h}}35^{\text{m}}14.1^{\text{s}}$   $10^{\circ}07'03''$  (J2000)  
 $l: 17.12$   $b: 47.89$

DATE: 1979/ 27 - 1979/ 27  
 LIVETIME: 1255.6s  
 ROLL ANGLE: -115.0°

NH:  $3.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

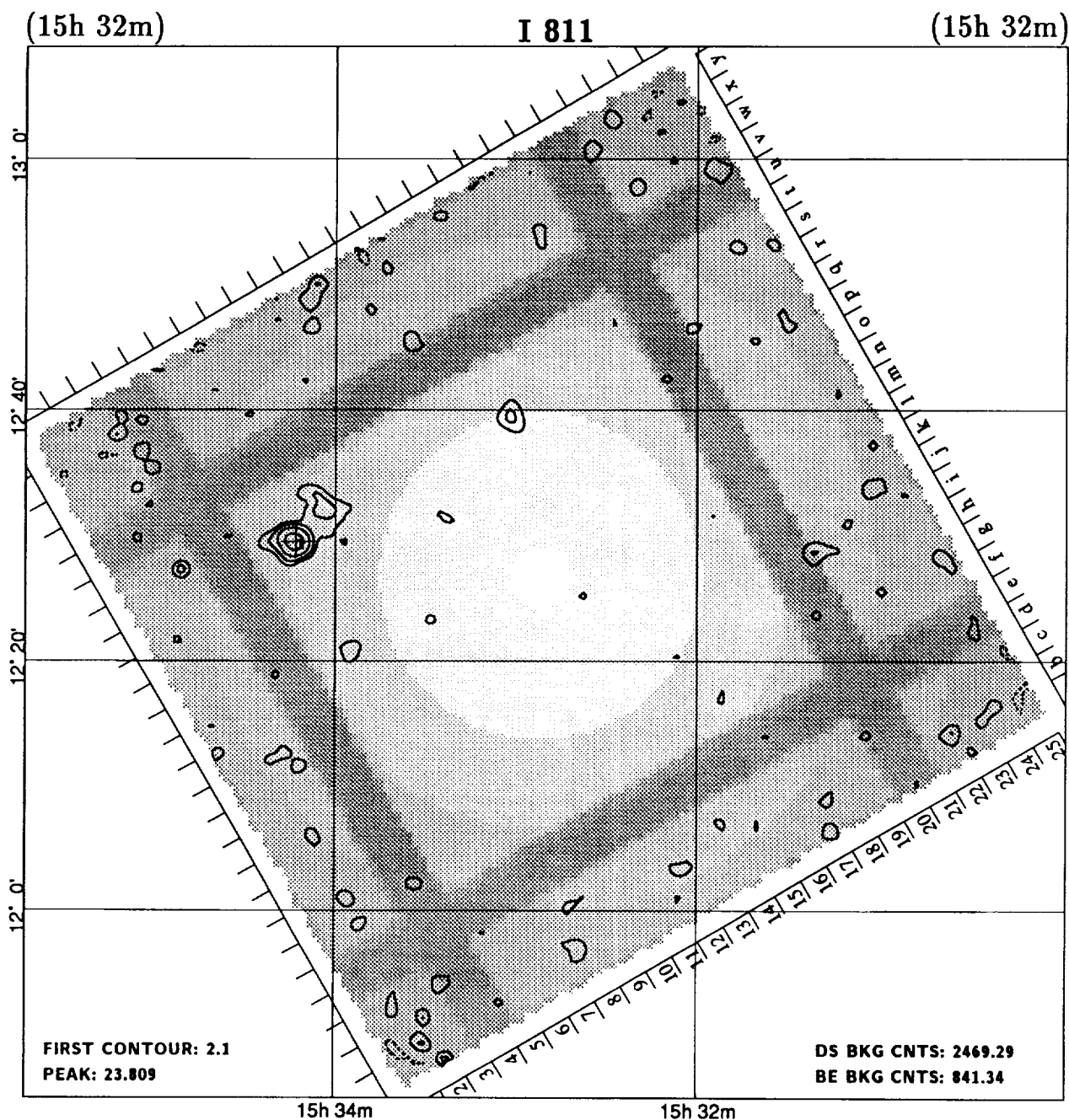


**N. POLAR SPUR: SOFT X-RAY BACKGROUND**

FIELD CENTER:  $15^{\text{h}}32^{\text{m}}50.0^{\circ}$   $11^{\circ}21'59''$  (B1950)  
 $15^{\text{h}}35^{\text{m}}13.0^{\circ}$   $11^{\circ}12'03''$  (J2000)  
 $l: 18.54$   $b: 48.42$

DATE: 1979/ 27 - 1979/ 27  
 LIVETIME: 961.3s  
 ROLL ANGLE:  $-111.1^{\circ}$

NH:  $3.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L



**N. POLAR SPUR: SOFT X-RAY BACKGROUND**

FIELD CENTER: 15<sup>h</sup> 32<sup>m</sup> 50.0<sup>s</sup> 12° 26' 59" (B1950)  
15<sup>h</sup> 35<sup>m</sup> 12.0<sup>s</sup> 12° 17' 03" (J2000)  
 $l$ : 19.98  $b$ : 48.93

DATE: 1979/ 27 - 1979/ 27  
LIVETIME: 2001.0s  
ROLL ANGLE: -120.1°

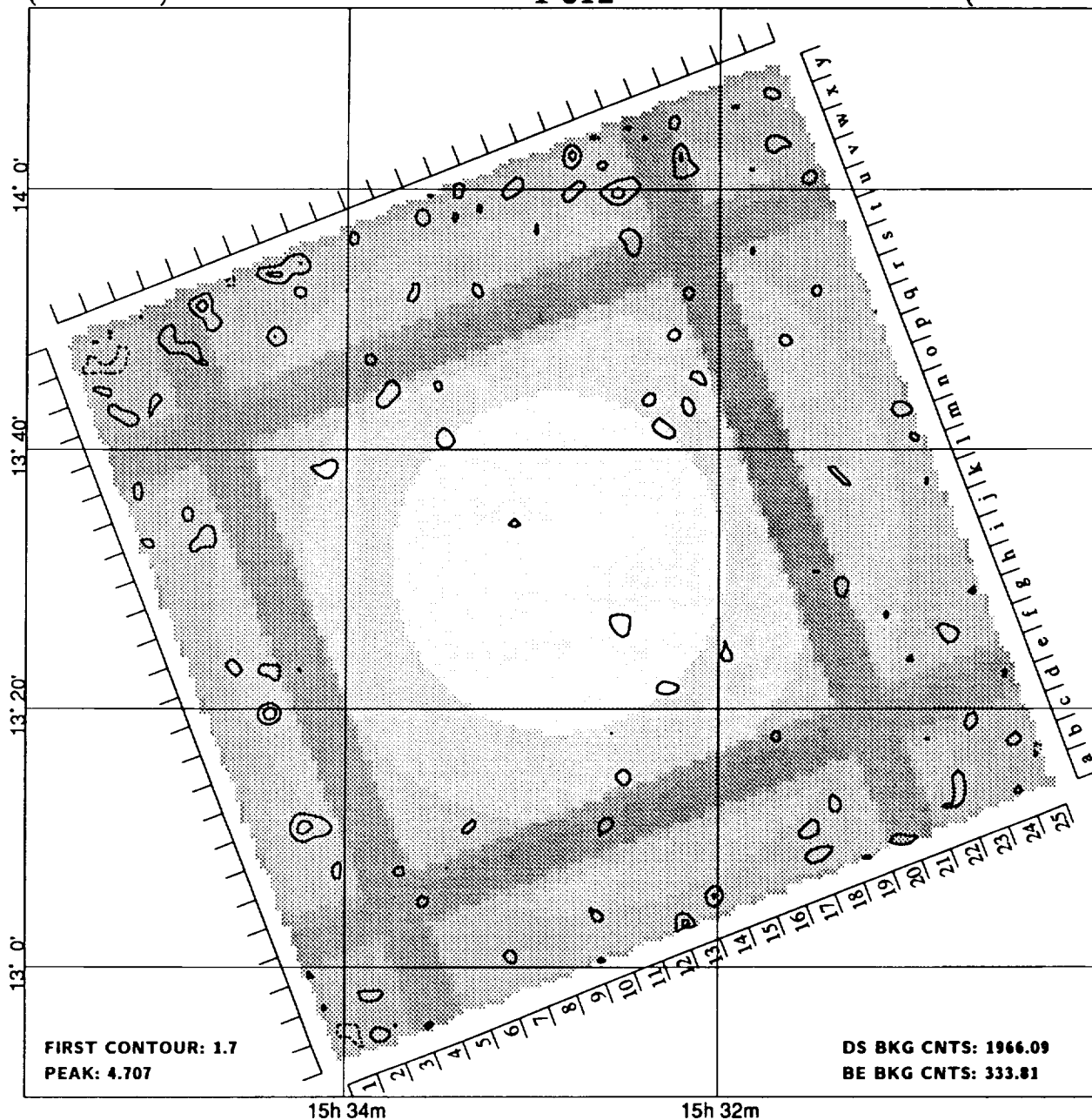
NH: 3.4E+20  
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3470	1	15 34 13.1	12 29 31	50	0.0599	0.0080	61.2	5.8	7.5	1.3	0	20.6	H	

(15h 32m)

I 812

(15h 32m)



FIELD CENTER:  $15^{\text{h}}32^{\text{m}}50.0^{\text{s}}$   $13^{\circ}31'59''$  (B1950)  
 $15^{\text{h}}35^{\text{m}}10.9^{\text{s}}$   $13^{\circ}22'03''$  (J2000)  
 $\ell$ : 21.46  $b$ : 49.42

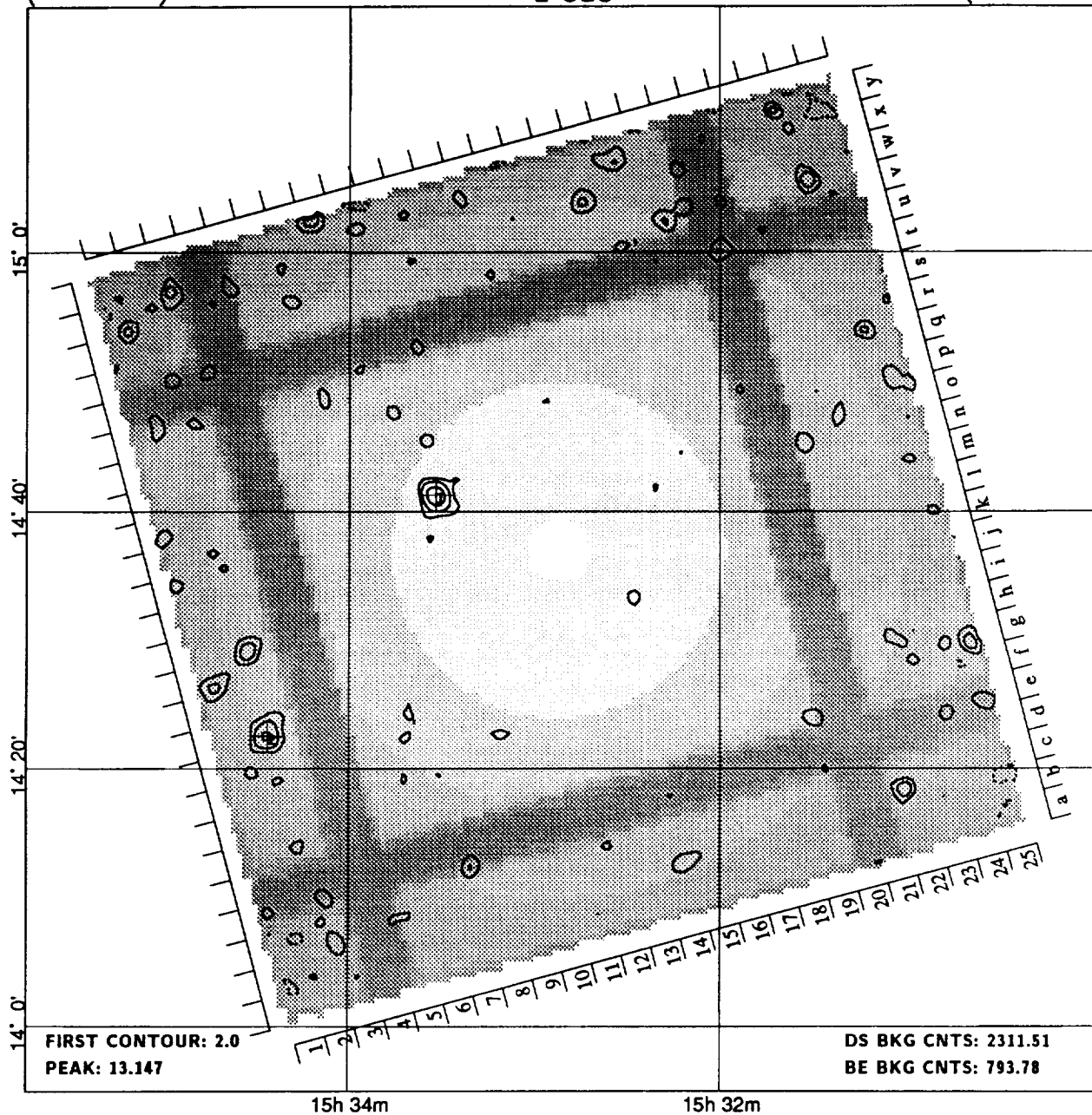
DATE: 1979/ 28 - 1979/ 28  
 LIVETIME: 1593.2s  
 ROLL ANGLE: -111.2°

NH: 3.5E+20  
 REF/ID:  
 FIELD FLAGS:

(15h 32m)

I 813

(15h 32m)



## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER: 15<sup>h</sup>32<sup>m</sup>50.0<sup>s</sup> 14°36'59" (B1950)  
 15<sup>h</sup>35<sup>m</sup>09.8<sup>s</sup> 14°27'03" (J2000)  
 $\ell$ : 22.96  $b$ : 49.90

DATE: 1979/ 28 - 1979/ 28

NH: 3.4E+20

LIVETIME: 1873.1s

REF/ID:

ROLL ANGLE: -105.0°

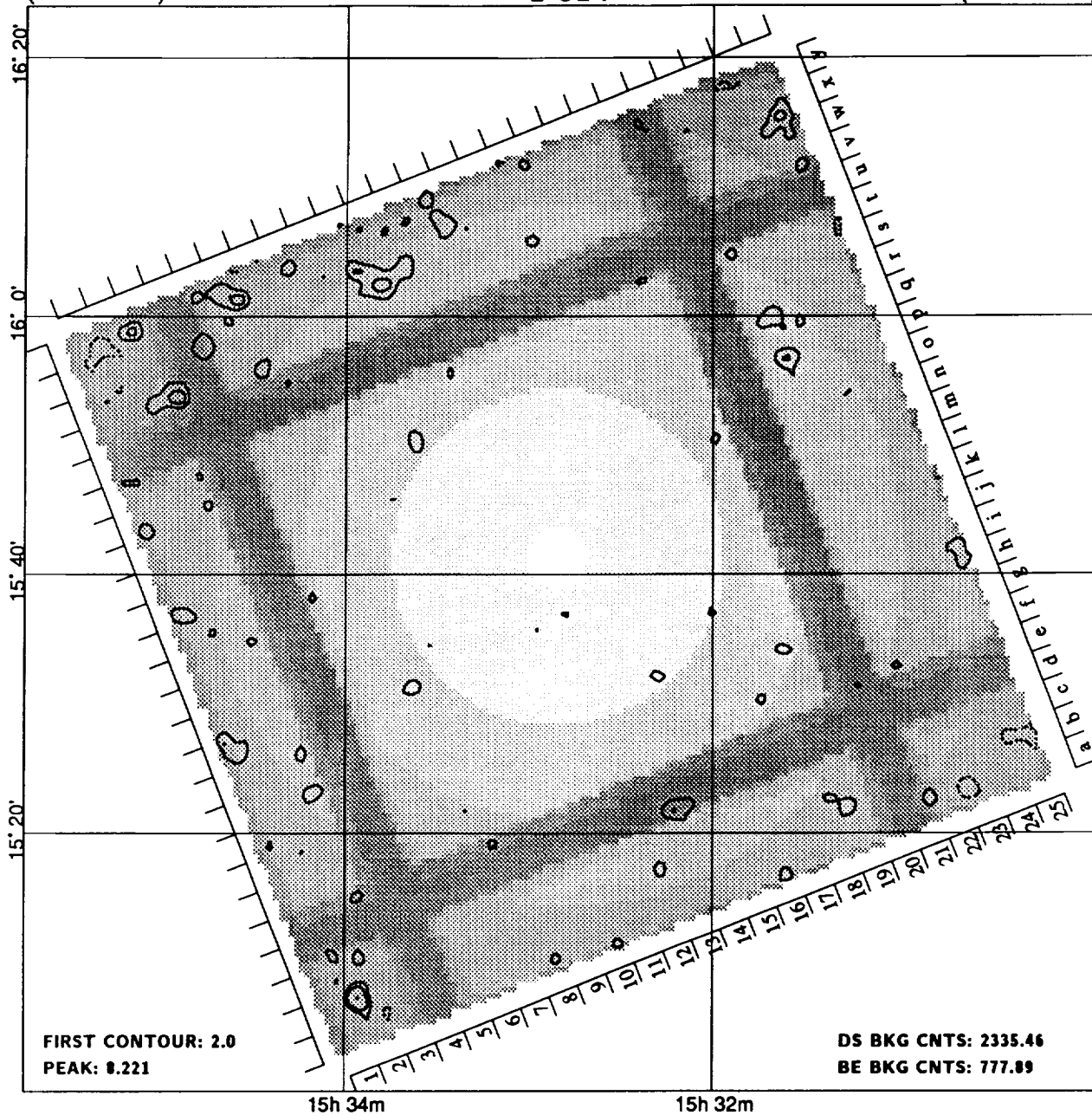
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3468	1	15 33 32.0	14 41 16	41	0.0264	0.0051	32.6	7.4	5.2	0.9	0	11.2	H	AGN
3472	2	15 34 26.1	14 22 31	55	0.0220	0.0063	16.5	5.5	3.5	0.8	0	27.5	H	

(15h 32m)

I 814

(15h 32m)



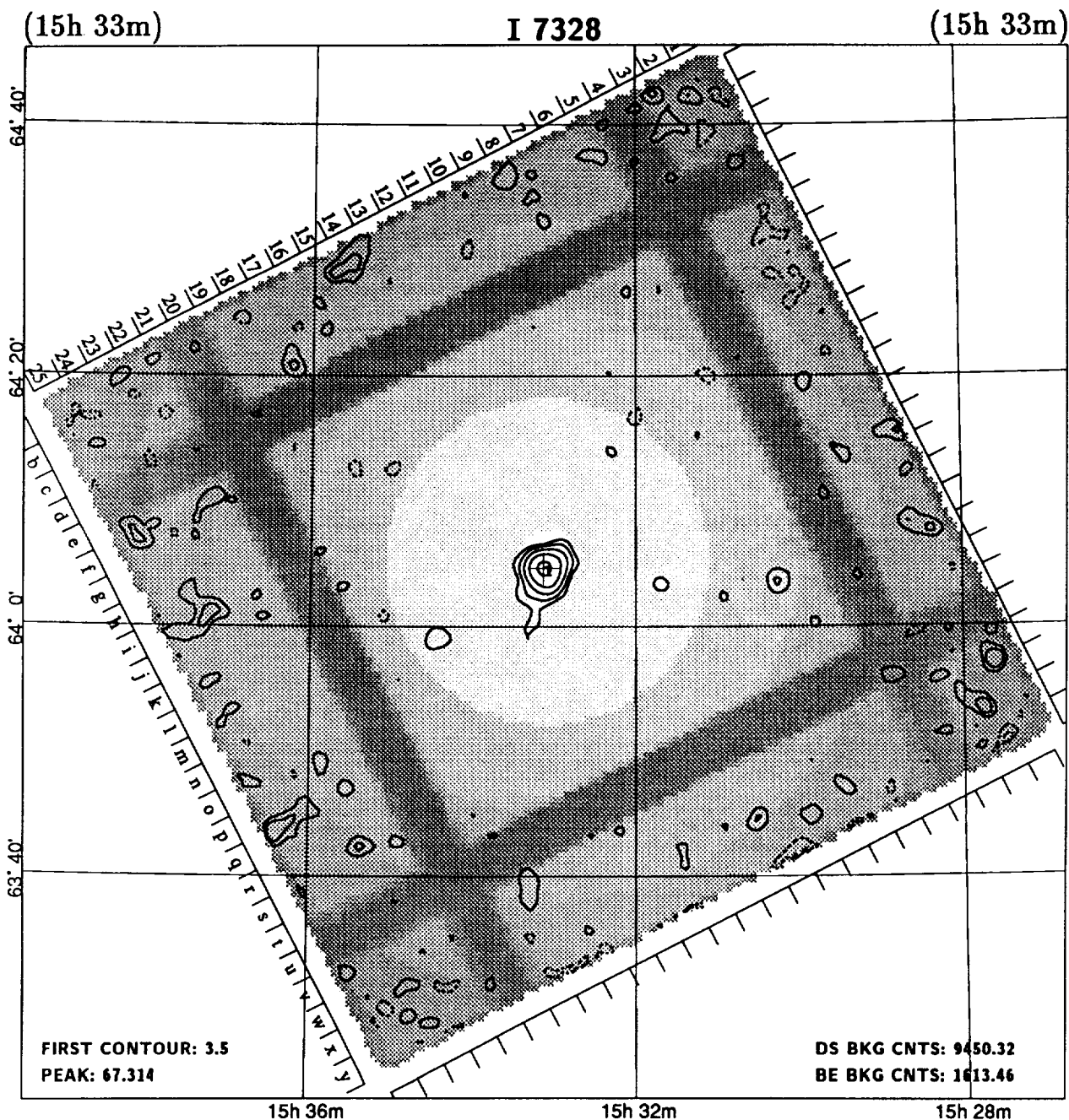
## N. POLAR SPUR: SOFT X-RAY BACKGROUND

FIELD CENTER:  $15^{\text{h}}32^{\text{m}}50.0^{\text{s}}$   $15^{\circ}41'59''$  (B1950)  
 $15^{\text{h}}35^{\text{m}}08.7^{\text{s}}$   $15^{\circ}32'03''$  (J2000)  
 $l$ : 24.50  $b$ : 50.35

DATE: 1979/ 28 - 1979/ 28  
 LIVETIME: 1892.5s  
 ROLL ANGLE:  $-111.4^{\circ}$

NH:  $3.1\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:





TW DRA, ALGOL-LIKE SYSTEM

FIELD CENTER:  $15^h 33^m 06.9^s$   $64^\circ 04' 21''$  (B1950)  
 $15^h 33^m 50.8^s$   $63^\circ 54' 23''$  (J2000)  
 $l: 99.07$   $b: 44.97$

DATE: 1980/204 - 1980/205  
 LIVETIME: 7657.9s  
 ROLL ANGLE:  $62.8^\circ$

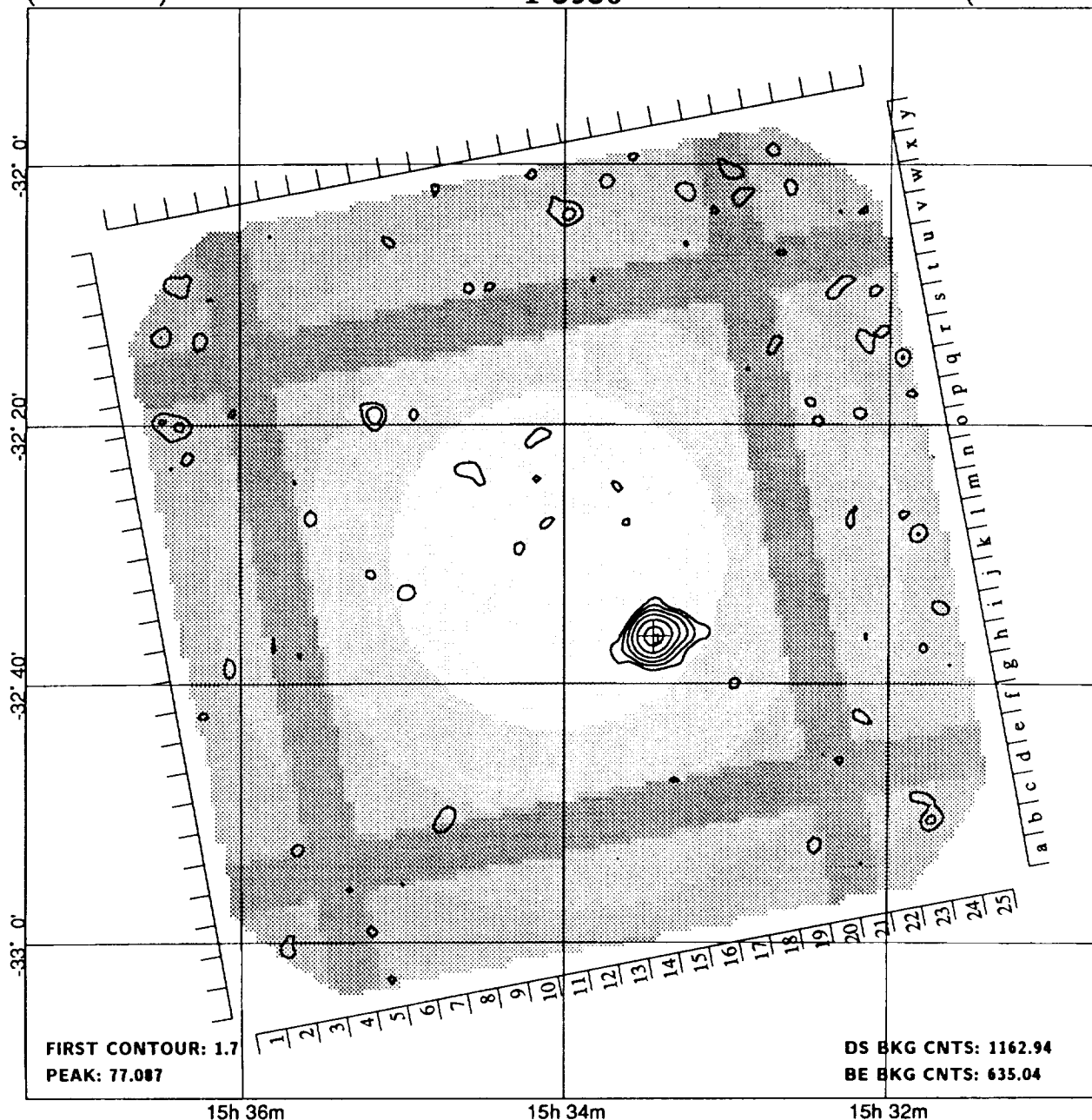
NH:  $1.9E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3466	1	15 33 08.3	64 04 35	31	0.0492	0.0031	280.7	28.3	16.0	1.3	0	0.4	H	S

(15h 34m)

I 3950

(15h 34m)



## H1540-32: EXTENDED SOFT SOURCE/POSSIBLE OLD SNR

FIELD CENTER: 15<sup>h</sup>34<sup>m</sup>00.0<sup>s</sup> -32°29'59" (B1950)  
 15<sup>h</sup>37<sup>m</sup>08.2<sup>s</sup> -32°39'50" (J2000)  
 $\ell$ : 338.88  $b$ : 18.40

DATE: 1980/ 51 - 1980/ 51  
 LIVETIME: 942.4s  
 ROLL ANGLE: -100.6°

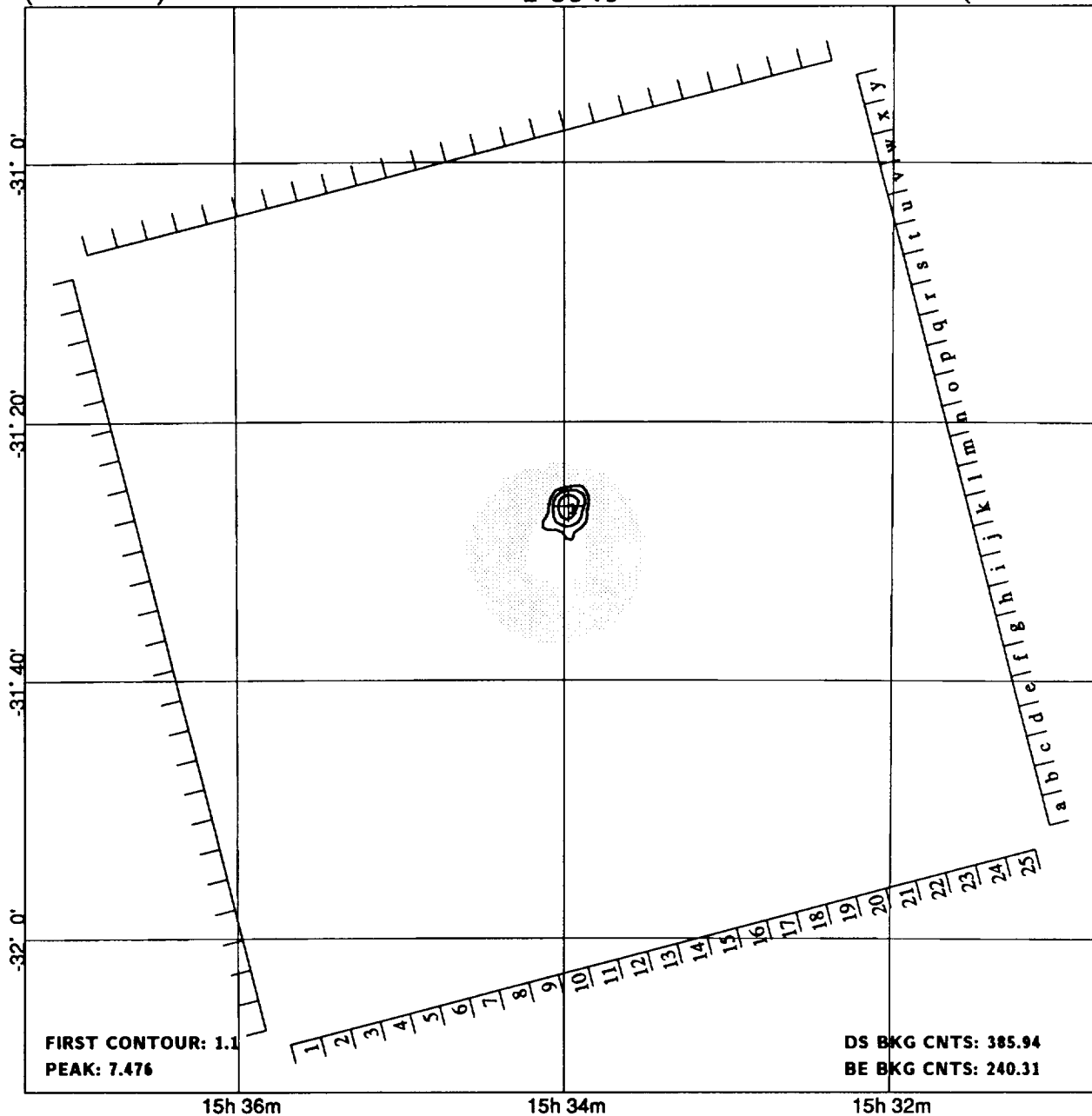
NH: 7.6E+20  
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3467	1L	15 33 26.9	-32 36 19	38	0.410	0.030	259.6	23.4	13.6	1.2	0	9.3		

(15h 34m)

I 3949

(15h 34m)



## H1540-32: EXTENDED SOFT SOURCE/POSSIBLE OLD SNR

FIELD CENTER: 15<sup>h</sup>34<sup>m</sup>00.0<sup>s</sup> -31°29'59" (B1950)

DATE: 1980/ 51 - 1980/ 51

NH: 7.8E+20

15<sup>h</sup>37<sup>m</sup>06.9<sup>s</sup> -31°39'50" (J2000)

LIVETIME: 312.7s

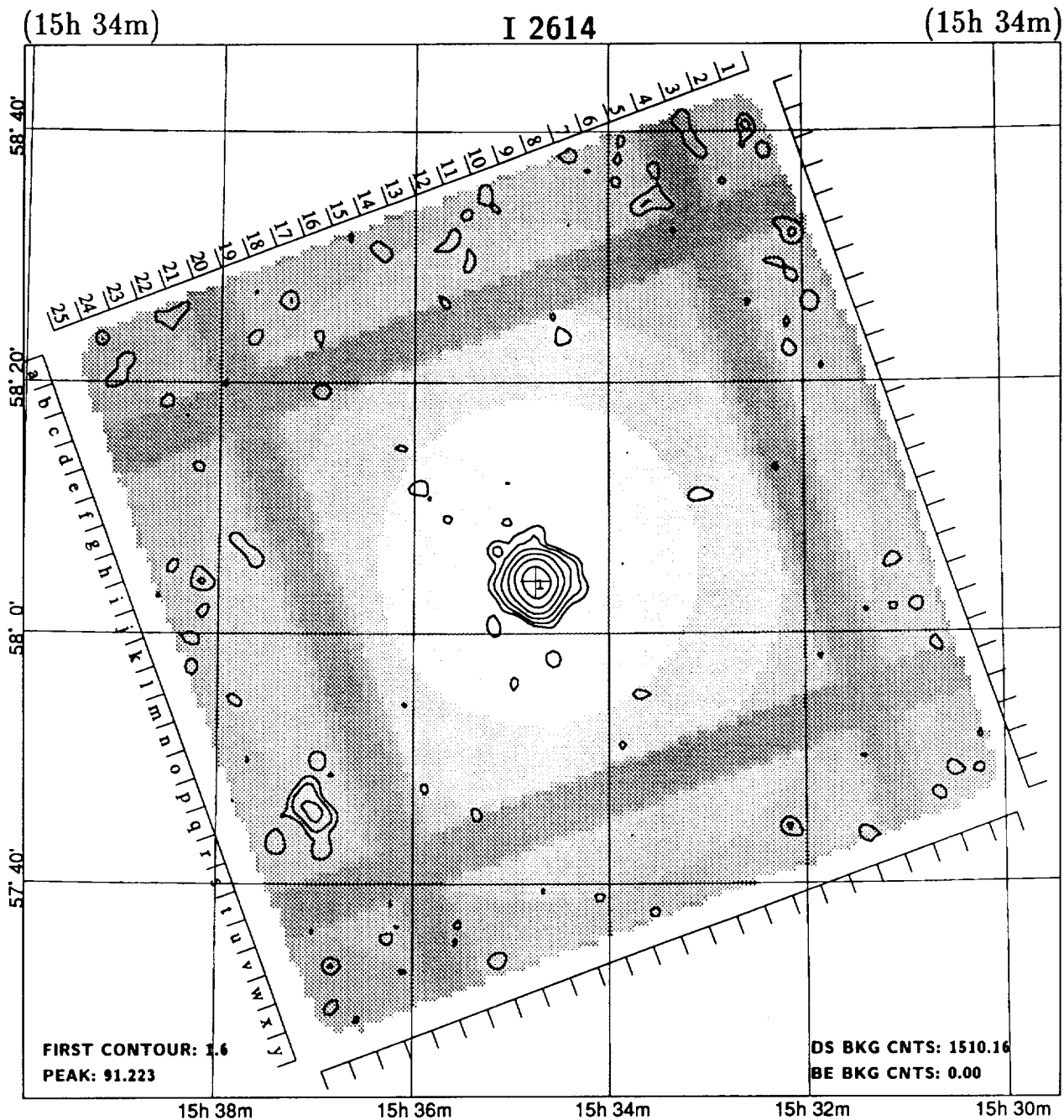
REF/ID:

ℓ: 339.53 b: 19.19

ROLL ANGLE: -104.5°

FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3469	1L	15 33 58.5	-31 26 34	36	0.101	0.027	23.0	5.0	3.6	1.0	0	3.4		



SEYFERT GALAXY SURVEY: MKN 290

FIELD CENTER:  $15^{\text{h}}34^{\text{m}}42.0^{\text{s}}$   $58^{\circ}04'59''$  (B1950)  
 $15^{\text{h}}35^{\text{m}}49.4^{\text{s}}$   $57^{\circ}55'08''$  (J2000)  
 $l$ : 91.52  $b$ : 47.95

DATE: 1979/210 - 1979/210  
 LIVETIME: 1223.7s  
 ROLL ANGLE: 70.0°

NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3474	1L	15 34 44.9	58 04 11	31	0.332	0.026	301.7	115.3	12.4	1.6	0	0.9		SY

(15h 35m)



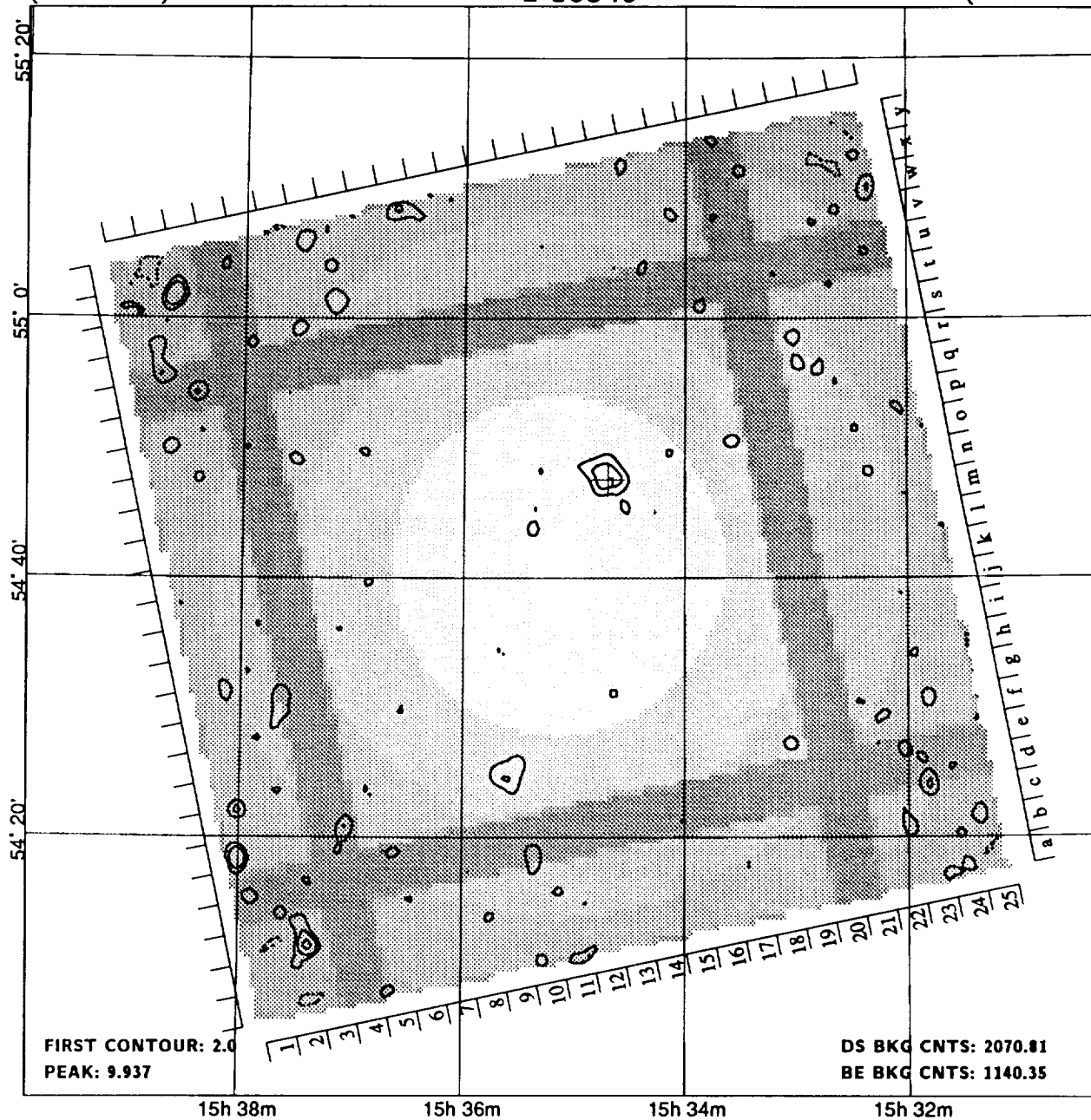
NH: 1.4E+20  
REF/ID:  
FIELD FLAGS: C

CAT	FLD	RA	DEC	±	COUNT	±	NET	BKG	S/N	SIZE	RECO	R'	SRC	ID
#	#	(1950)	(1950)	"	RATE		CTS	CTS		COR			FLG	
3473	1	15 34 40.7	54 48 01	41	0.0416	0.0081	30.0	4.0	5.1	1.0	0	6.8	AH	

(15h 35m)

I 10549

(15h 35m)



## MKN 486 (STEINER) SEYFERT FOLLOWUP

FIELD CENTER:  $15^h 35^m 06.0^s$   $54^\circ 41' 59''$  (B1950)  
 $15^h 36^m 23.7^s$   $54^\circ 32' 10''$  (J2000)  
 $l: 86.91$   $b: 49.44$

DATE: 1981/ 37 - 1981/ 37  
 LIVETIME: 1678.1s  
 ROLL ANGLE:  $-101.8^\circ$

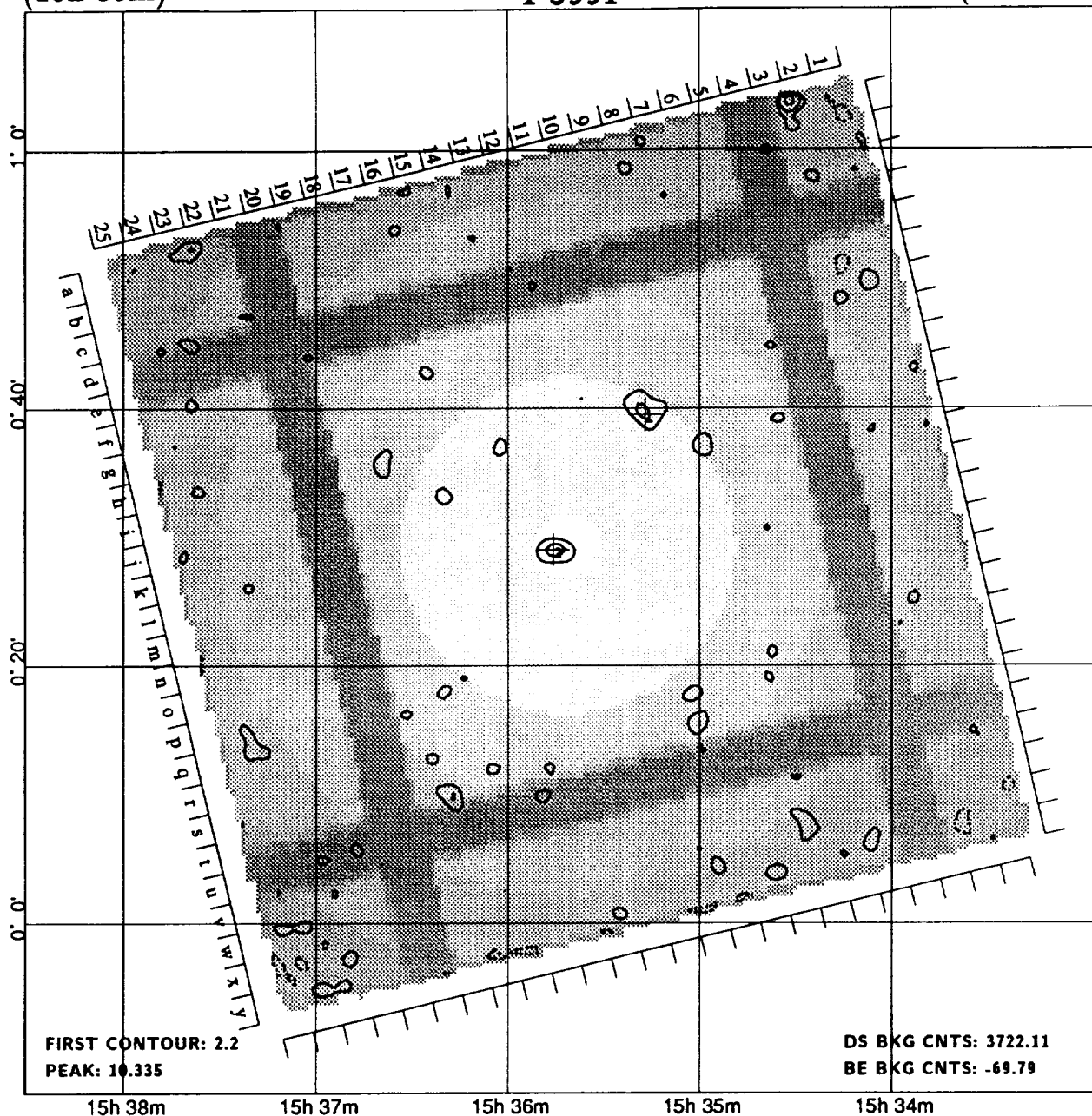
NH:  $1.4E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3473	1	15 34 41.7	54 47 32	43	0.0221	0.0050	25.6	7.4	4.4	1.1	0	7.1	AH	

(15h 35m)

I 3991

(15h 35m)



## 1535+004, OPTICALLY-QUIET COMPACT RADIO SOURCE

FIELD CENTER: 15<sup>h</sup>35<sup>m</sup>42.6<sup>s</sup> 00°28'50" (B1950)

DATE: 1979/229 - 1979/229

NH: 5.9E+20

15<sup>h</sup>38<sup>m</sup>16.0<sup>s</sup> 00°19'05" (J2000)

LIVETIME: 3016.1s

REF/ID:

ℓ: 6.17 b: 41.83

ROLL ANGLE: 76.5°

FIELD FLAGS:

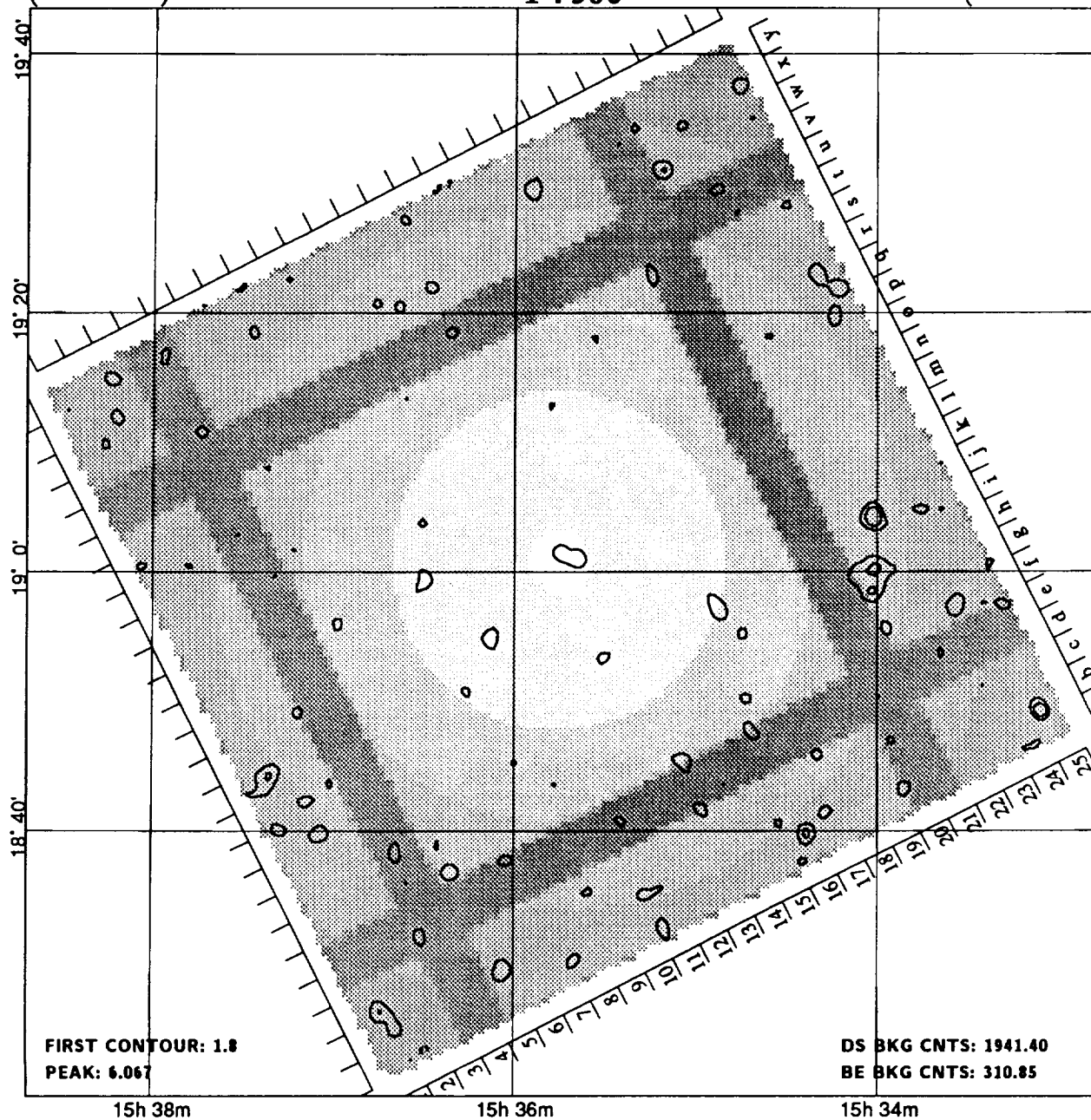
CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3476	1	15 35 17.0	00 39 29	46	0.0096	0.0027	18.6	8.4	3.6	0.8	0	12.4	H	
3478	2	15 35 45.8	00 29 02	37	0.0091	0.0024	20.4	9.6	3.7	0.7	0	0.8	H	



(15h 35m)

I 7906

(15h 35m)

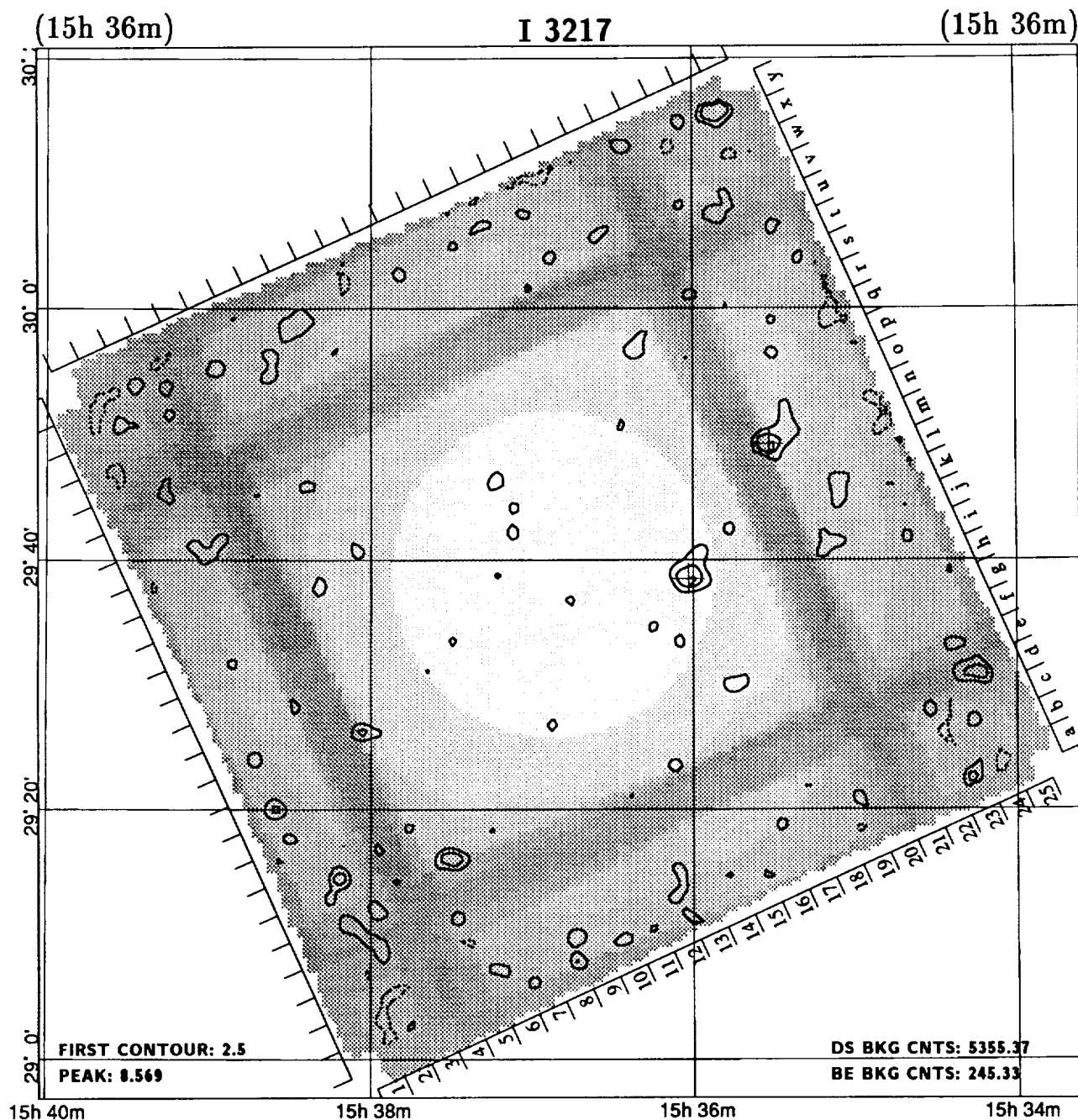


## STEPANIAN,4 BLUE GALACTIC EMISSION LINE OBJECTS

FIELD CENTER:  $15^{\text{h}}35^{\text{m}}44.0^{\text{s}}$   $19^{\circ}01'29''$  (B1950)  
 $15^{\text{h}}37^{\text{m}}59.1^{\text{s}}$   $18^{\circ}51'43''$  (J2000)  
 $l$ : 29.77  $b$ : 50.97

DATE: 1980/ 20 - 1980/ 20  
 LIVETIME: 1573.2s  
 ROLL ANGLE:  $-116.9^{\circ}$

NH:  $3.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



FIELD CENTER:  $15^{\text{h}}36^{\text{m}}50.0^{\text{s}}$   $29^{\circ}38'56''$  (B1950)  
 $15^{\text{h}}38^{\text{m}}52.9^{\text{s}}$   $29^{\circ}29'14''$  (J2000)  
 $l: 46.71$   $b: 53.27$

DATE: 1979/ 29 - 1980/ 23  
 LIVETIME: 4339.7s  
 ROLL ANGLE:  $-114.4^{\circ}$

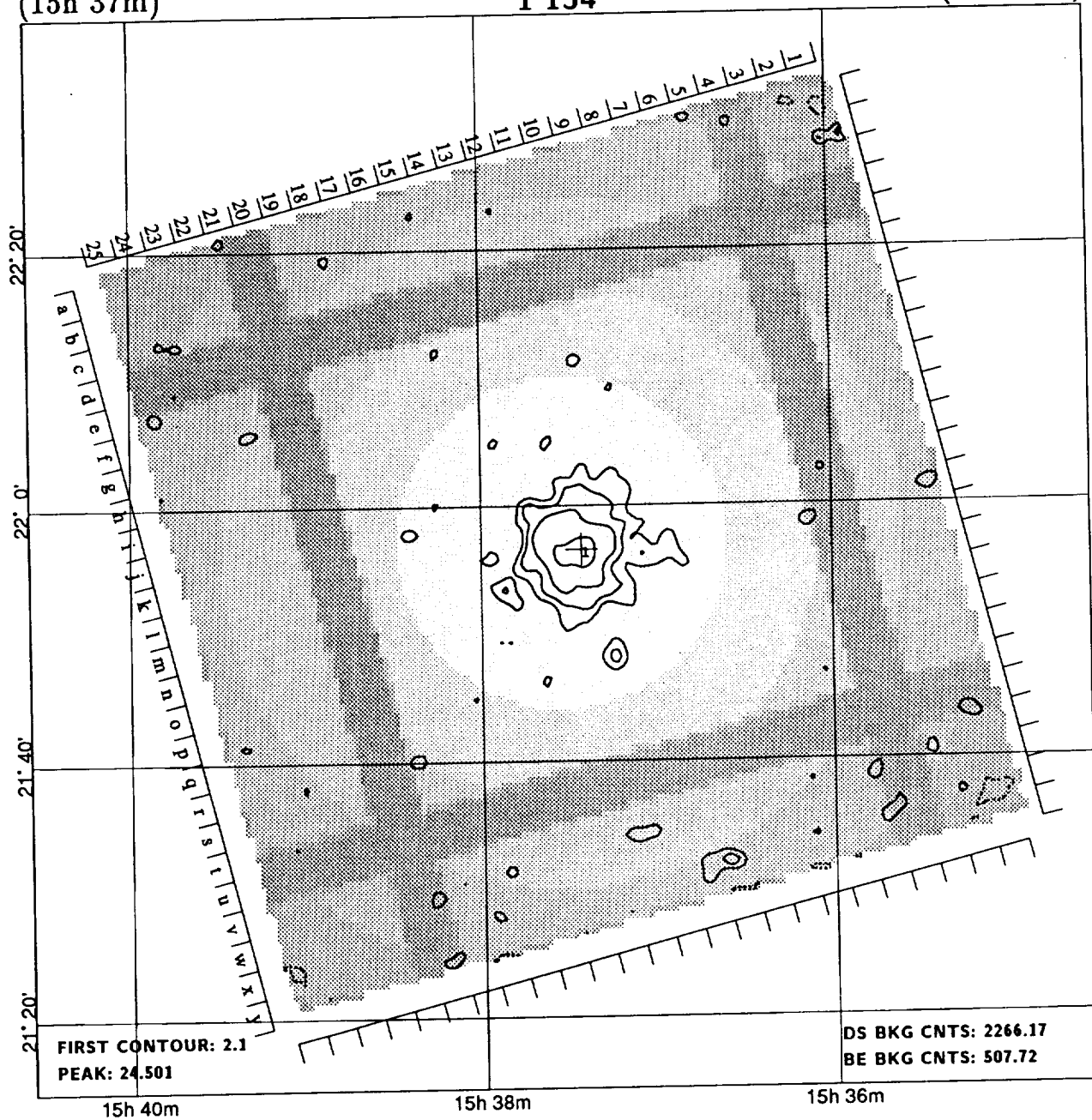
NH:  $2.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3477	1	15 35 31.6	29 49 14	55	*0.0100	0.0025	21.9	7.1	4.1	1.2	906	19.7	H	S
3479	2	15 36 01.7	29 38 29	42	0.0107	0.0023	30.5	11.5	4.7	1.0	0	10.5	H	CV

(15h 37m)

I 134

(15h 37m)



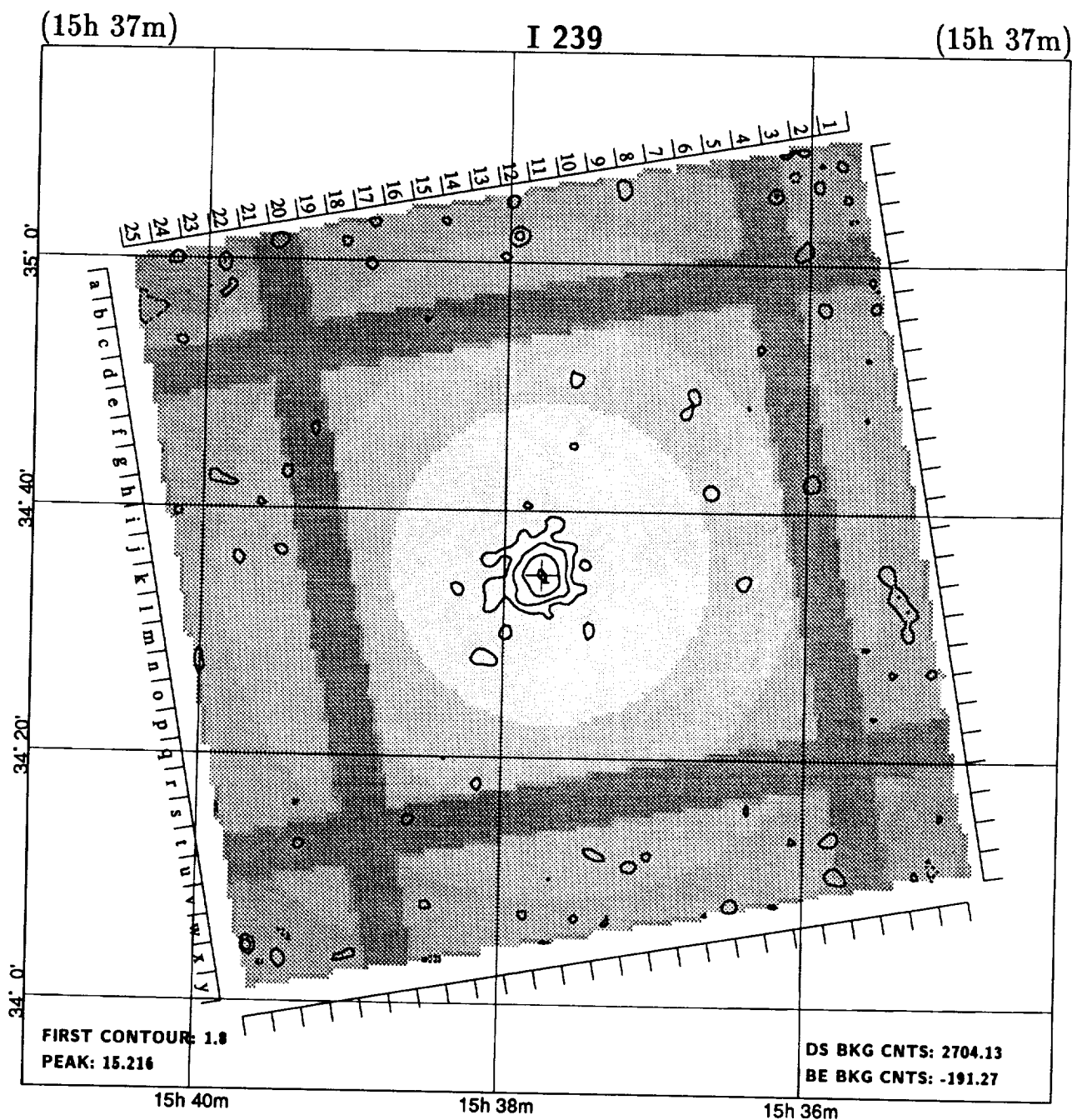
## A2107 CLUSTER SURFACE BRIGHTNESS

FIELD CENTER:  $15^h 37^m 33.6^s$   $21^\circ 56' 23''$  (B1950)  
 $15^h 39^m 45.5^s$   $21^\circ 46' 44''$  (J2000)  
 $l: 34.40$   $b: 51.50$

DATE: 1979/225 - 1979/225  
 LIVETIME: 1836.3s  
 ROLL ANGLE:  $75.5^\circ$

NH:  $4.5E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3482	1	15 37 25.7	21 56 32	31	0.0888	0.0083	120.6	6.4	10.7	4.5	0	1.5	H	CLG



# A 2111 CLUSTER EVOLUTION

FIELD CENTER:  $15^h 37^m 43.0^s$   $34^\circ 34' 59''$  (B1950)  
 $15^h 39^m 39.3^s$   $34^\circ 25' 20''$  (J2000)  
 $l: 54.98$   $b: 53.41$

DATE: 1979/229 - 1979/229  
LIVETIME: 2191.2s  
ROLL ANGLE:  $80.1^\circ$

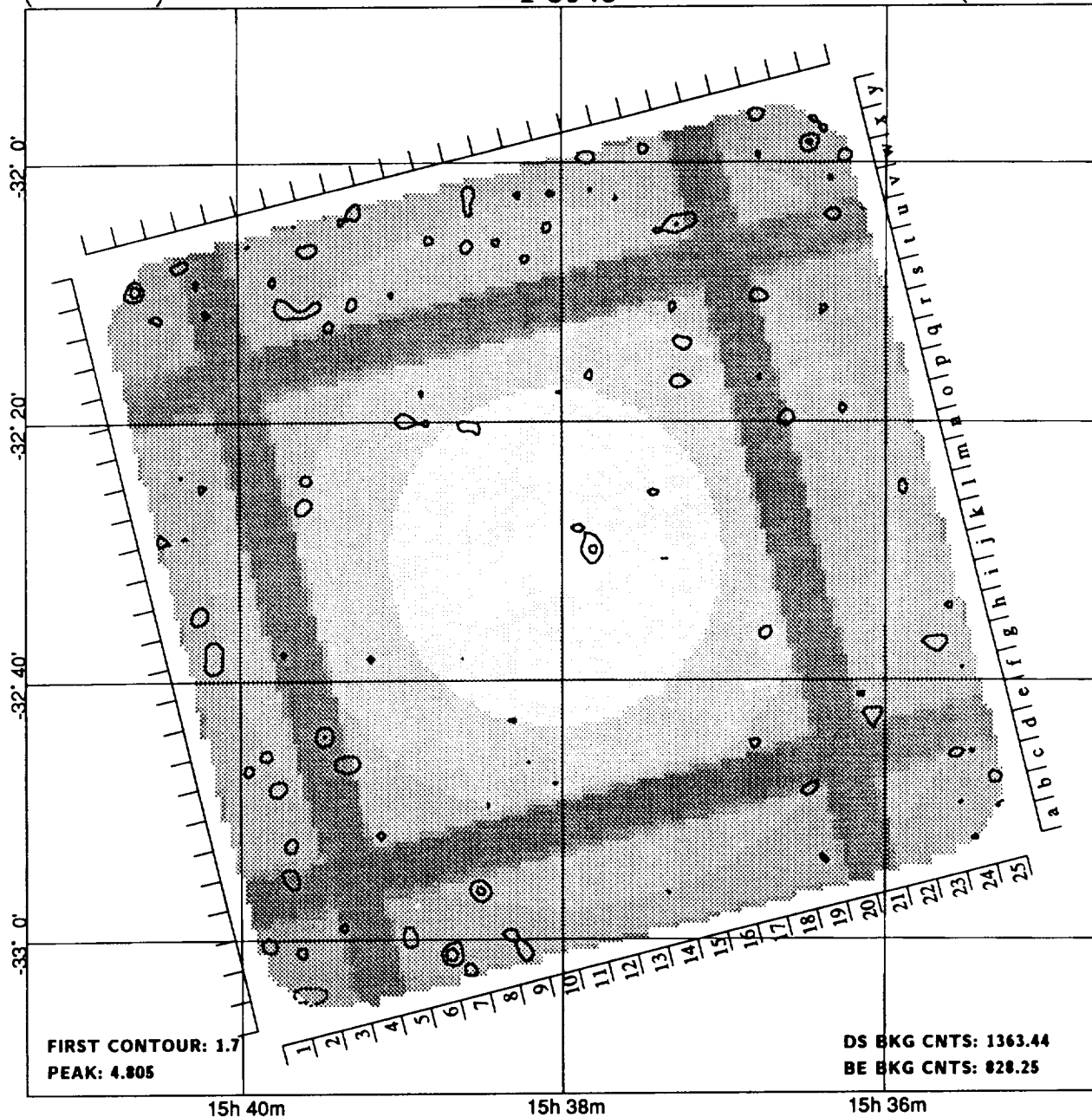
NH:  $2.0E+20$   
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3484	1	15 37 45.2	34 34 49	32	0.0496	0.0057	80.7	6.3	8.7	2.1	0	0.4	H	CLG

(15h 38m)

I 3945

(15h 38m)



H1540-32: EXTENDED SOFT SOURCE/POSSIBLE OLD SNR

FIELD CENTER:  $15^{\text{h}}38^{\text{m}}00.0^{\text{s}}$   $-32^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}41^{\text{m}}08.7^{\text{s}}$   $-32^{\circ}39'36''$  (J2000)  
 $l: 339.57$   $b: 17.88$

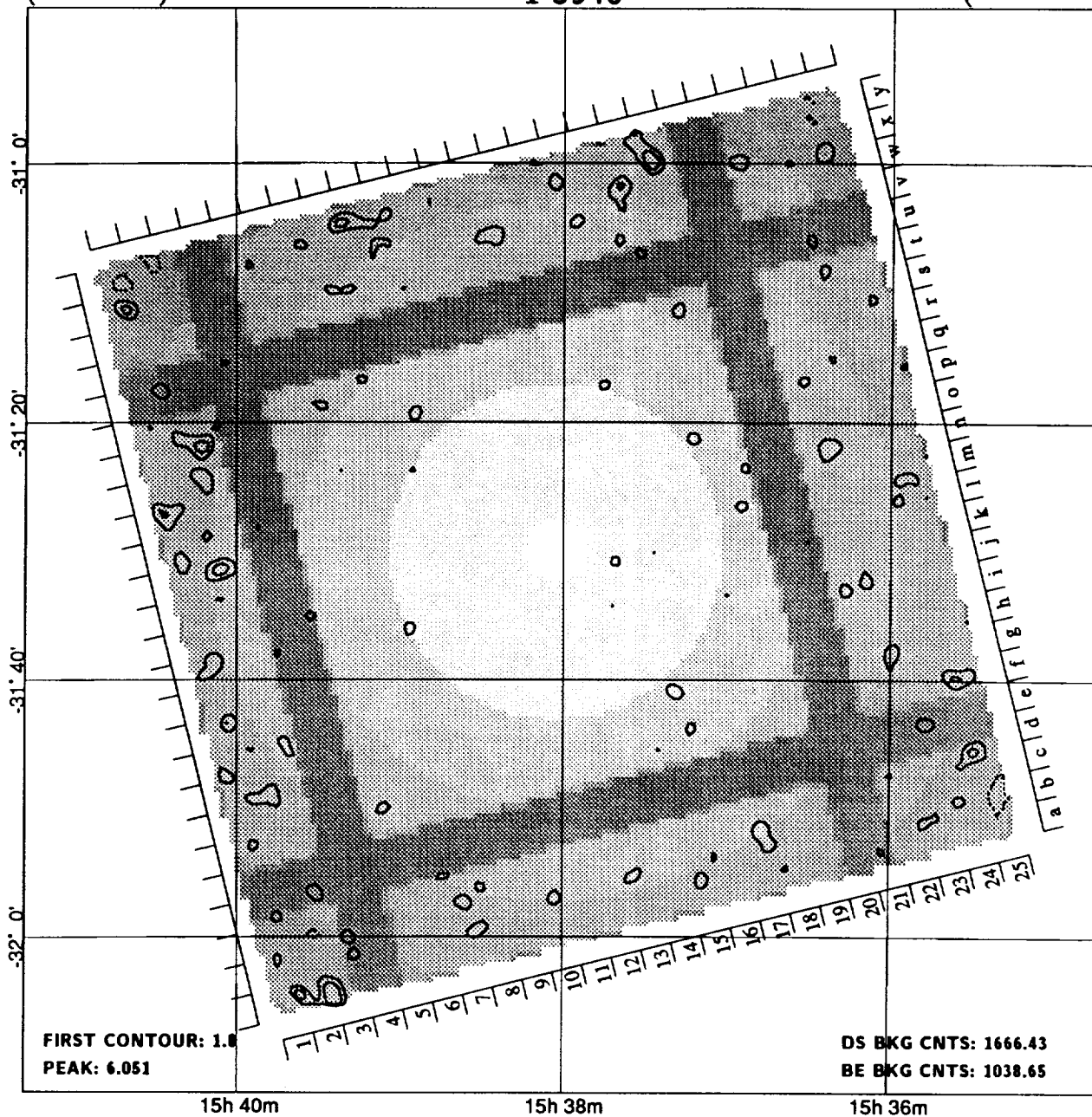
DATE: 1980/ 51 - 1980/ 51  
 LIVETIME: 1104.9s  
 ROLL ANGLE:  $-103.9^{\circ}$

NH:  $7.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(15h 38m)

I 3946

(15h 38m)



**FIELD CENTER:**  $15^{\text{h}}38^{\text{m}}00.0^{\text{s}}$   $-31^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}41^{\text{m}}07.3^{\text{s}}$   $-31^{\circ}39'36''$  (J2000)  
 $l: 340.23$   $b: 18.66$

**DATE:** 1980/ 51 - 1980/ 51  
**LIVETIME:** 1350.4s  
**ROLL ANGLE:**  $-104.0^{\circ}$

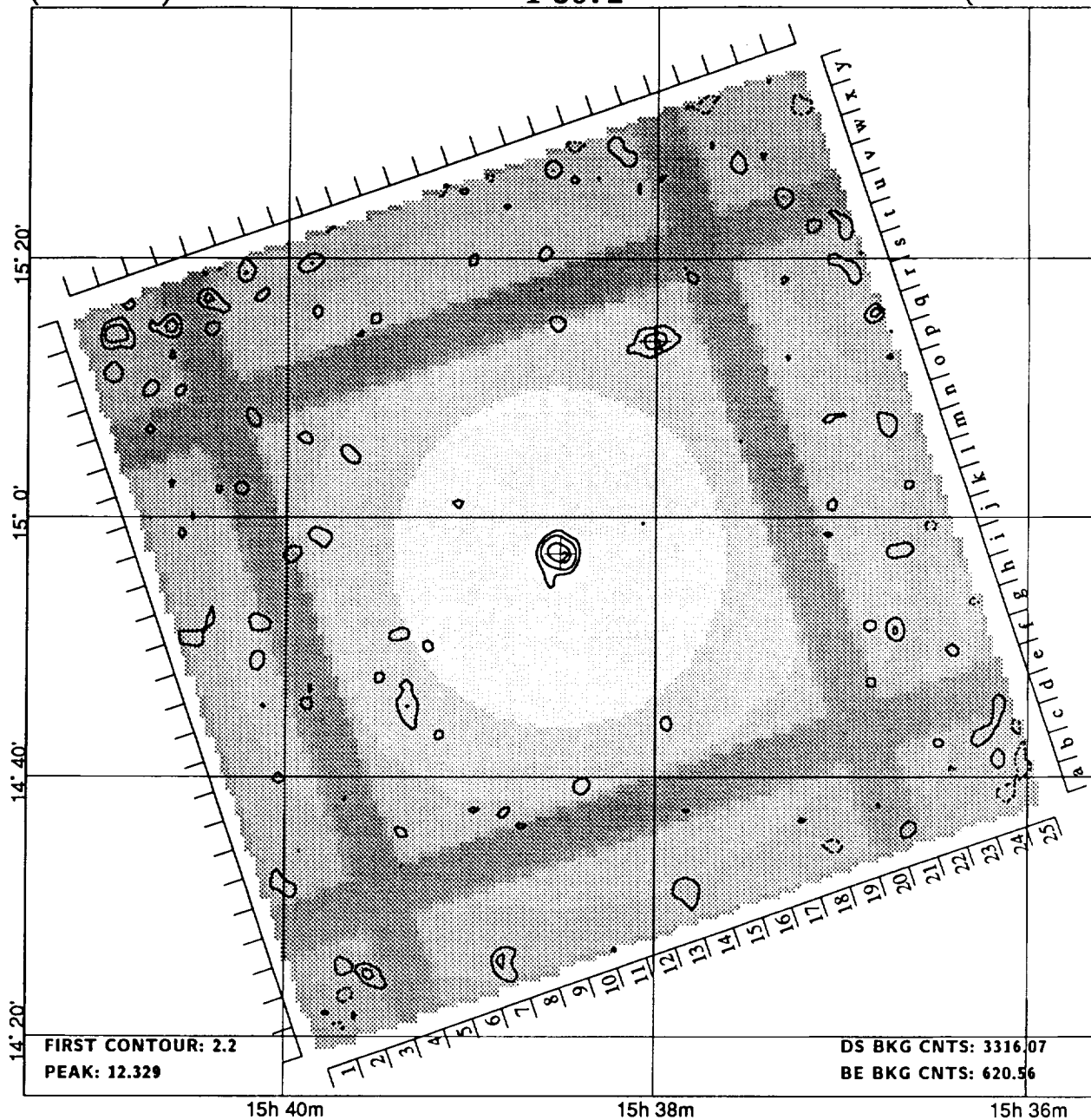
**NH:**  $7.3\text{E}+20$   
**REF/ID:**  
**FIELD FLAGS:** L



(15h 38m)

I 3072

(15h 38m)



## 4C 14.60: BL LAC'S IN CLUSTERS OF GALAXIES

FIELD CENTER:  $15^{\text{h}}38^{\text{m}}30.0^{\text{s}}$   $14^{\circ}57'21''$  (B1950)  
 $15^{\text{h}}40^{\text{m}}49.2^{\text{s}}$   $14^{\circ}47'45''$  (J2000)  
 $\ell$ : 24.33  $b$ : 48.80

DATE: 1979/ 33 - 1979/ 33  
 LIVETIME: 2687.1s  
 ROLL ANGLE:  $-109.0^{\circ}$

NH:  $3.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

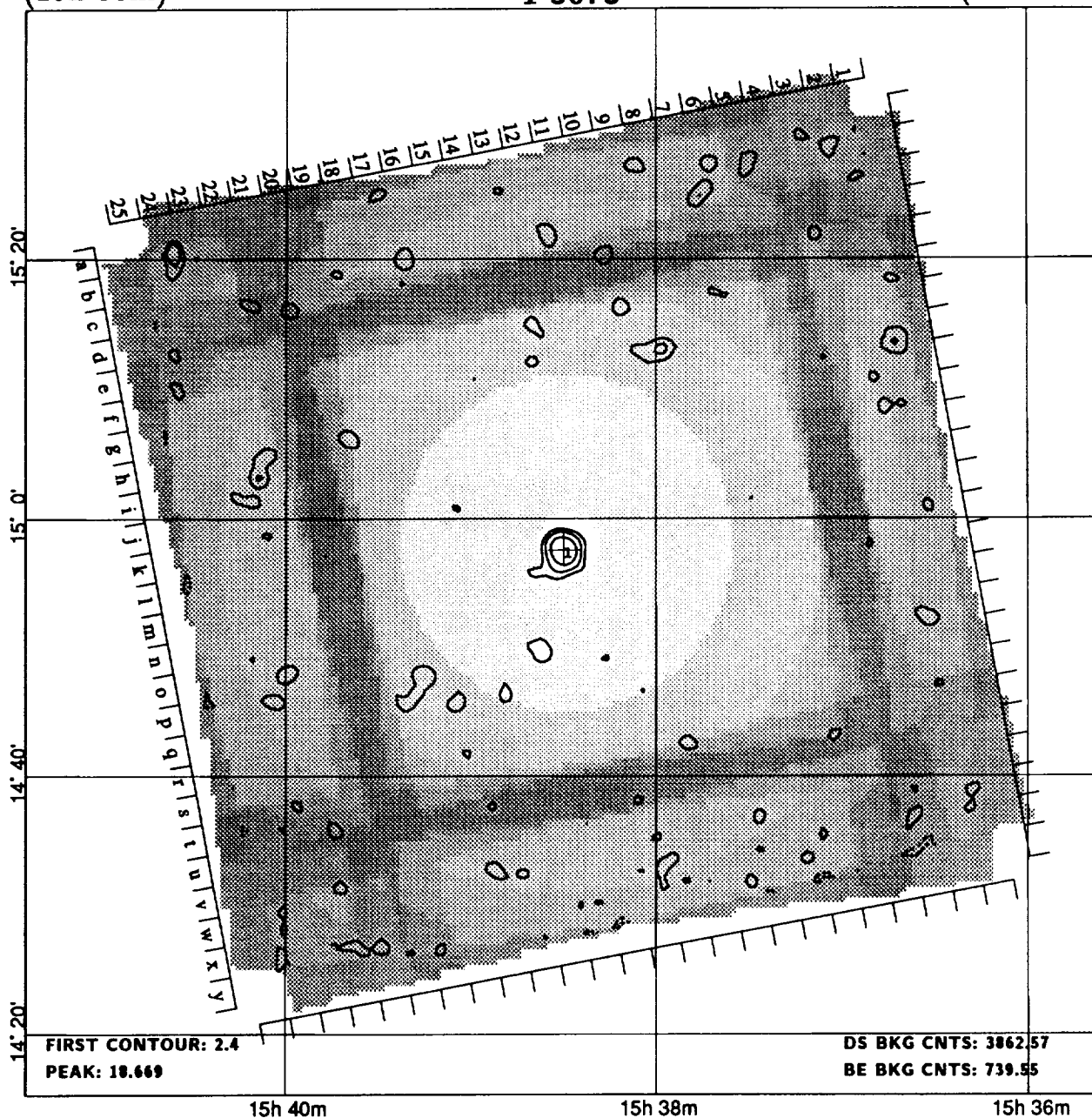
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3485	1	15 38 00.6	15 13 35	55	0.0131	0.0035	18.9	7.1	3.7	0.8	0	17.8	H	
3486	2	15 38 31.0	14 57 12	35	0.0287	0.0041	57.5	9.5	7.0	0.9	0	0.4	AH	BL



(15h 38m)

I 3073

(15h 38m)



## 4C 14.60: BL LAC'S IN CLUSTERS OF GALAXIES

FIELD CENTER:  $15^{\text{h}}38^{\text{m}}30.0^{\text{s}}$   $14^{\circ}57'21''$  (B1950)  
 $15^{\text{h}}40^{\text{m}}49.2^{\text{s}}$   $14^{\circ}47'45''$  (J2000)  
 $\ell$ : 24.33  $b$ : 48.80

DATE: 1979/226 - 1979/240  
 LIVETIME: 3129.9s  
 ROLL ANGLE:  $79.3^{\circ}$

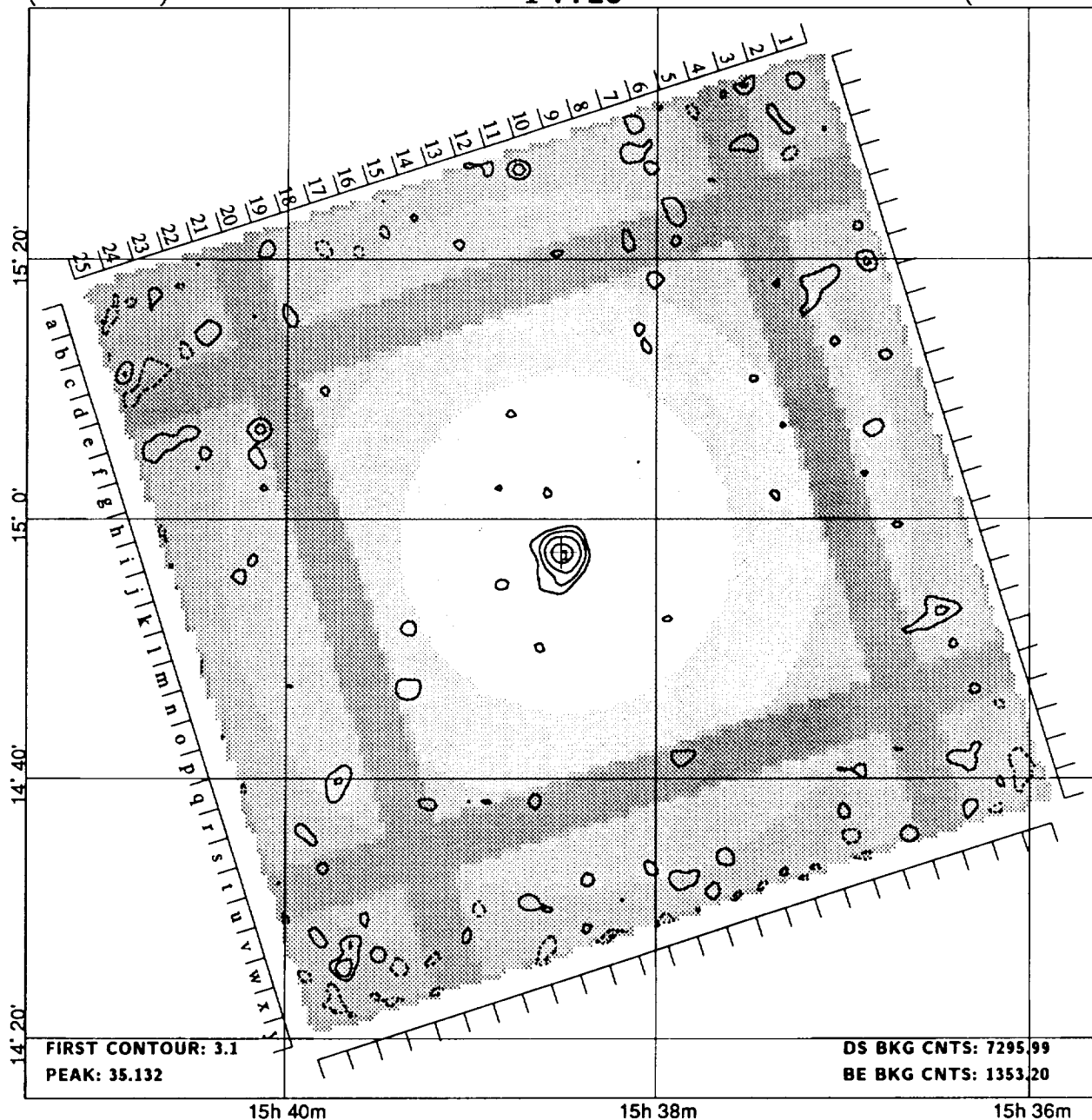
NH:  $3.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3486	1	15 38 30.1	14 57 31	32	0.0344	0.0041	80.1	11.9	8.4	1.0	0	0.2	AH	BL

(15h 38m)

I 7728

(15h 38m)



## 4C 14.60,BL LAC OBJECTS W/GROUPS OR CLUSTERS OF GALAXIES

FIELD CENTER: 15<sup>h</sup>38<sup>m</sup>30.0<sup>s</sup> 14°57'21" (B1950)15<sup>h</sup>40<sup>m</sup>49.2<sup>s</sup> 14°47'45" (J2000)

ℓ: 24.33 b: 48.80

DATE: 1980/220 - 1980/220

LIVETIME: 5912.2s

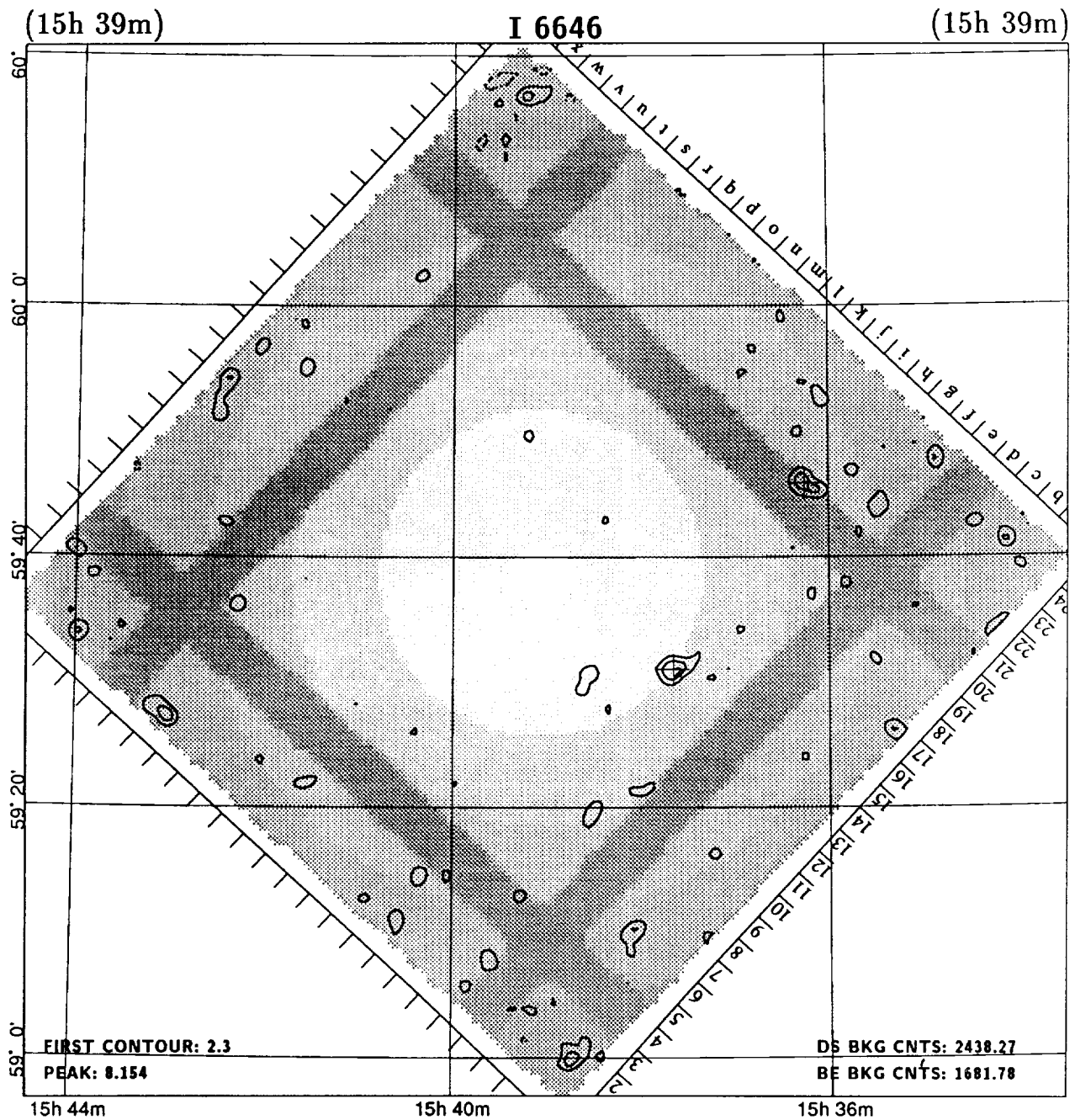
ROLL ANGLE: 72.4°

NH: 3.2E+20

REF/ID:

FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3486	1	15 38 30.8	14 57 24	31	0.0332	0.0029	145.9	22.1	11.3	1.2	0	0.2	AH	BL



**TG102,SURVEY OF GROUPS OF GALAXIES**

**FIELD CENTER:**  $15^{\text{h}}39^{\text{m}}00.0^{\text{s}}$   $59^{\circ}38'59''$  (B1950)  
 $15^{\text{h}}40^{\text{m}}00.7^{\text{s}}$   $59^{\circ}29'23''$  (J2000)  
 $l: 93.14$   $b: 46.71$

**DATE:** 1980/ 2 - 1980/ 2  
**LIVETIME:** 1975.9s  
**ROLL ANGLE:** -137.4°

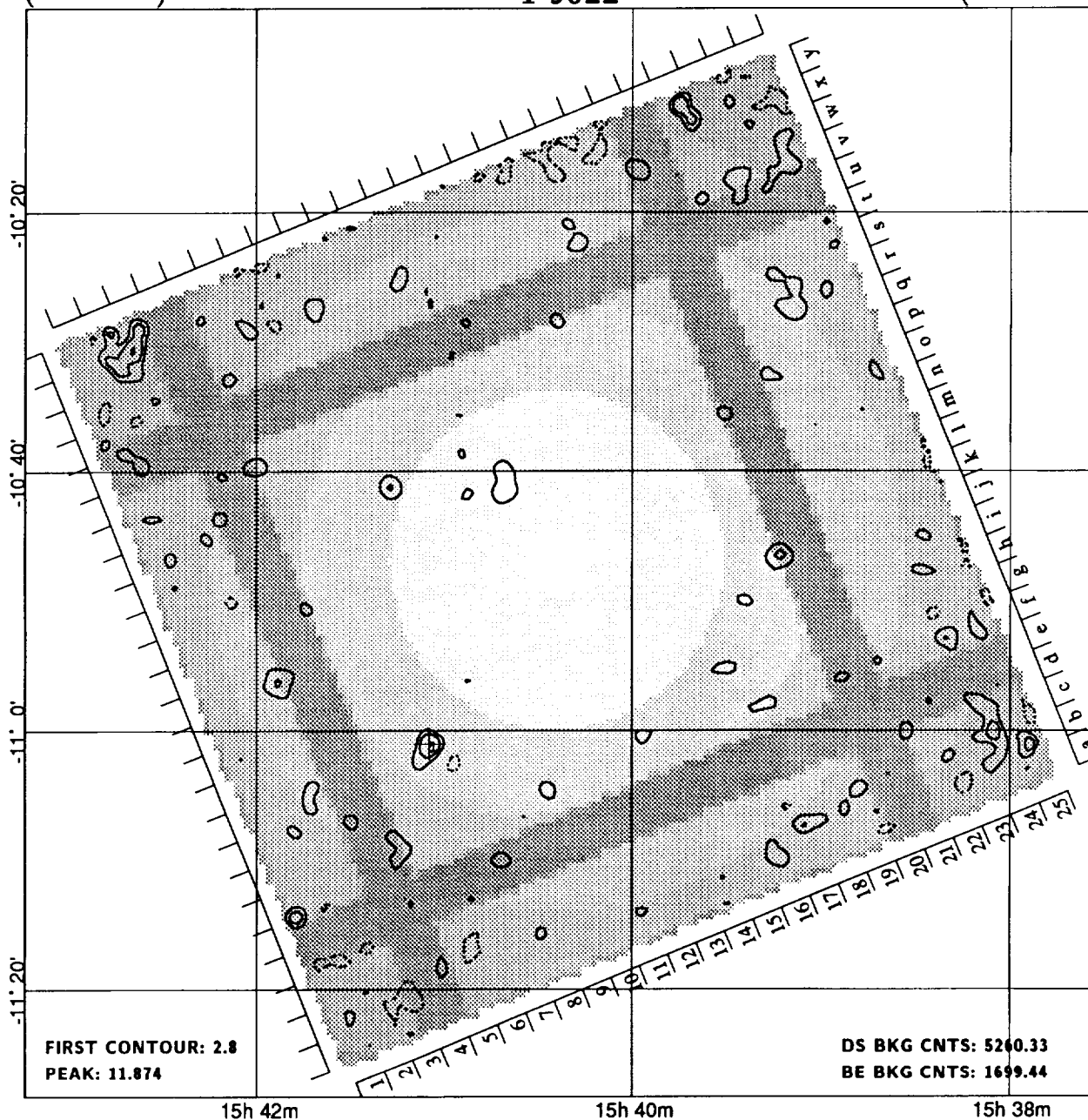
**NH:** 1.8E+20  
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3480	1	15 36 15.5	59 45 53	59	*0.0174	0.0049	16.3	4.7	3.6	0.8	1008	21.7	H	
3483	2	15 37 39.2	59 31 03	42	0.0162	0.0044	19.9	9.1	3.7	0.8	0	12.9		

(15h 40m)

I 9022

(15h 40m)



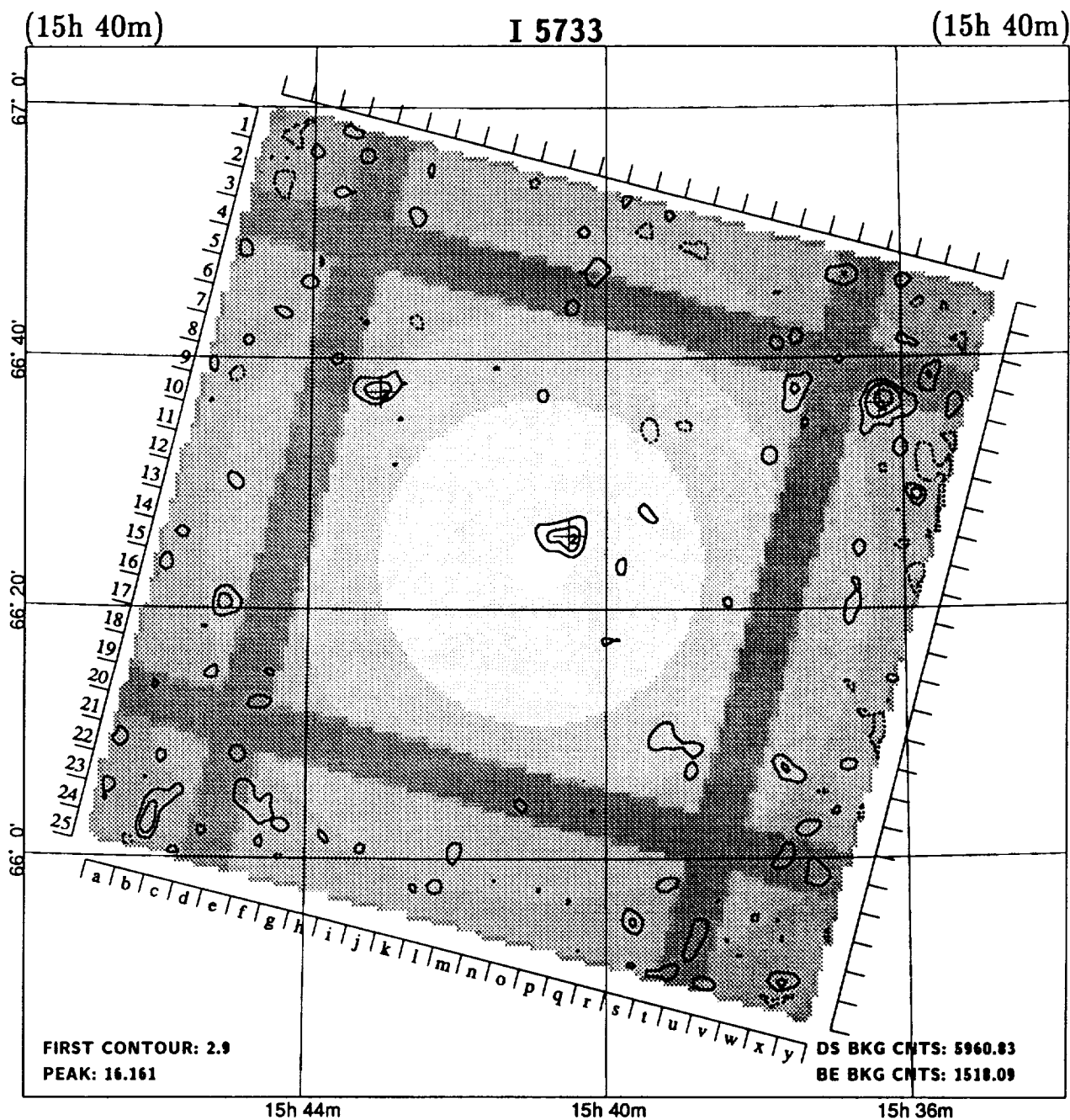
## CORONAE OF METAL DEFICIENT STARS: HD 140203

**FIELD CENTER:**  $15^h 40^m 22.5^s$   $-10^\circ 46' 17''$  (B1950)  
 $15^h 43^m 06.8^s$   $-10^\circ 55' 46''$  (J2000)  
 $l: 356.33$   $b: 33.61$

**DATE:** 1981/ 28 - 1981/ 28  
**LIVETIME:** 4262.7s  
**ROLL ANGLE:** -112.1°

**NH:**  $1.1E+21$   
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3489	1	15 41 04.8	-11 01 01	51	0.0101	0.0026	23.9	14.1	3.9	0.8	0	18.0		



CLUSTERS WITH IPC: A2125

FIELD CENTER: 15<sup>h</sup>40<sup>m</sup>48.0<sup>s</sup> 66°22'59" (B1950)  
15<sup>h</sup>41<sup>m</sup>16.7<sup>s</sup> 66°13'28" (J2000)  
ℓ: 101.09 b: 43.00

DATE: 1980/154 - 1980/154  
LIVETIME: 4830.3s  
ROLL ANGLE: 14.3°

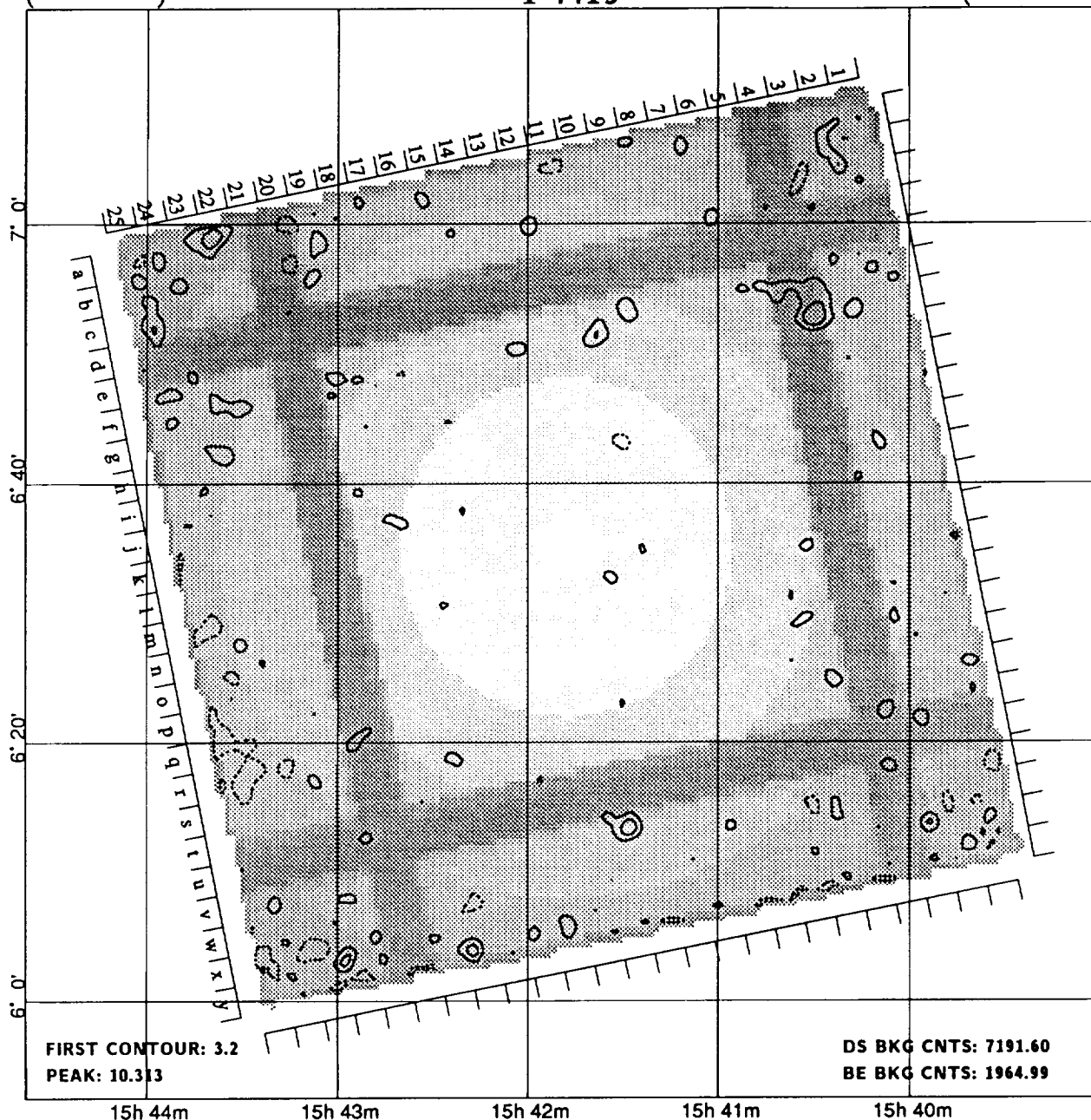
NH: 3.0E+20  
REF/ID:  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3481	1	15 36 18.7	66 36 22	52	*0.0181	0.0038	30.5	9.5	4.8	1.2	806	30.4	H	
3488	2	15 40 30.4	66 25 54	36	0.0097	0.0020	34.1	17.9	4.7	1.1	0	3.2	H	CLG
3493	3	15 43 04.0	66 37 21	53	0.0095	0.0024	24.3	12.7	4.0	0.9	0	19.8	H	

(15h 41m)

I 4419

(15h 41m)



## STELLAR SURVEY: ALPHA SER

FIELD CENTER:  $15^{\text{h}}41^{\text{m}}49.0^{\text{s}}$   $06^{\circ}34'29''$  (B1950)  
 $15^{\text{h}}44^{\text{m}}16.4^{\text{s}}$   $06^{\circ}25'06''$  (J2000)  
 $l: 14.20$   $b: 44.07$

DATE: 1979/226 - 1979/226  
 LIVETIME: 5827.6s  
 ROLL ANGLE:  $78.7^{\circ}$

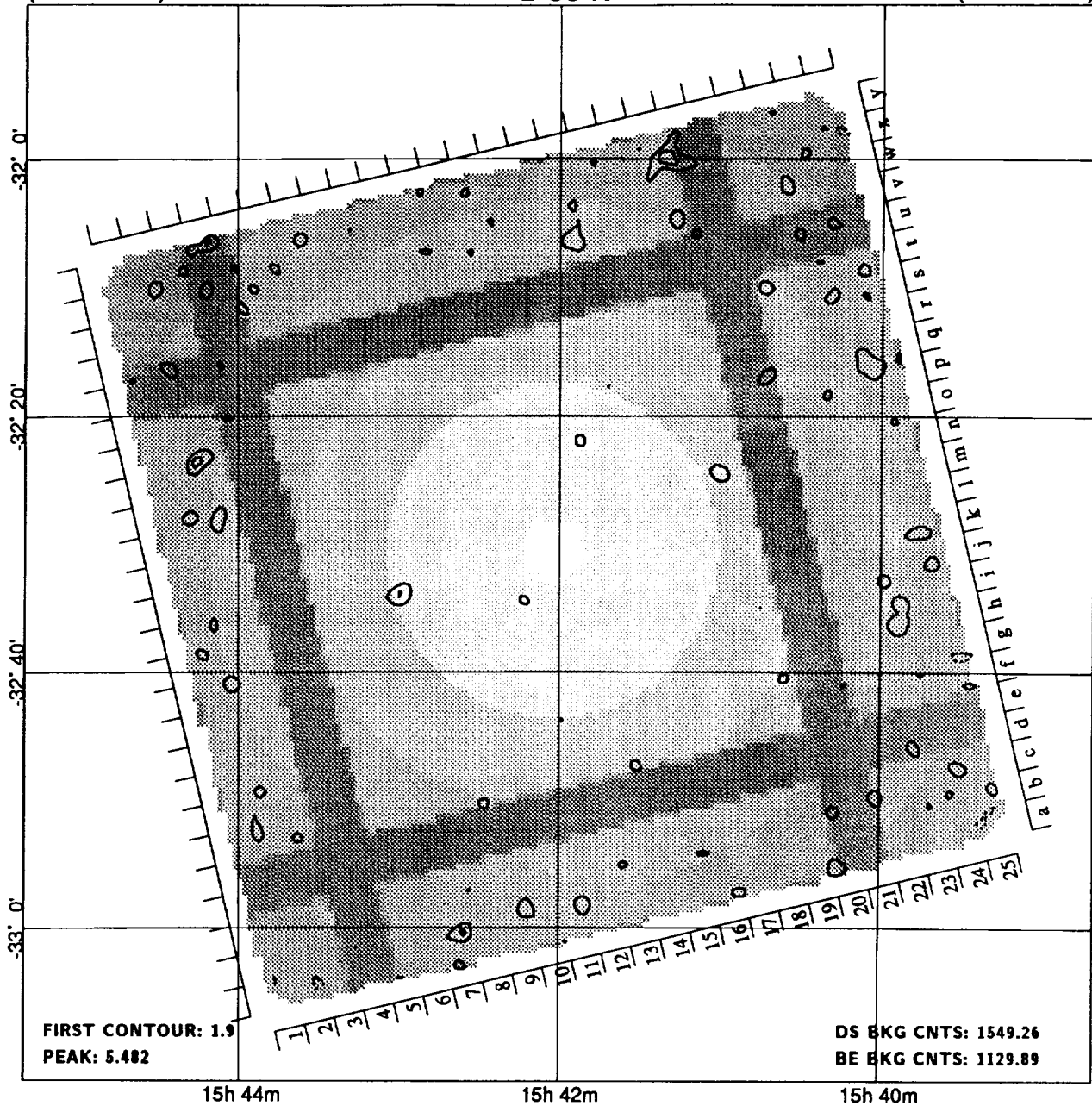
NH:  $3.7\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



(15h 42m)

I 3947

(15h 42m)



**H1540-32: EXTENDED SOFT SOURCE/POSSIBLE OLD SNR**

FIELD CENTER:  $15^{\text{h}}42^{\text{m}}00.0^{\text{s}}$   $-32^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}45^{\text{m}}09.1^{\text{s}}$   $-32^{\circ}39'21''$  (J2000)  
 $l$ : 340.26  $b$ : 17.34

DATE: 1980/ 51 - 1980/ 51  
LIVETIME: 1255.4s  
ROLL ANGLE:  $-103.4^{\circ}$

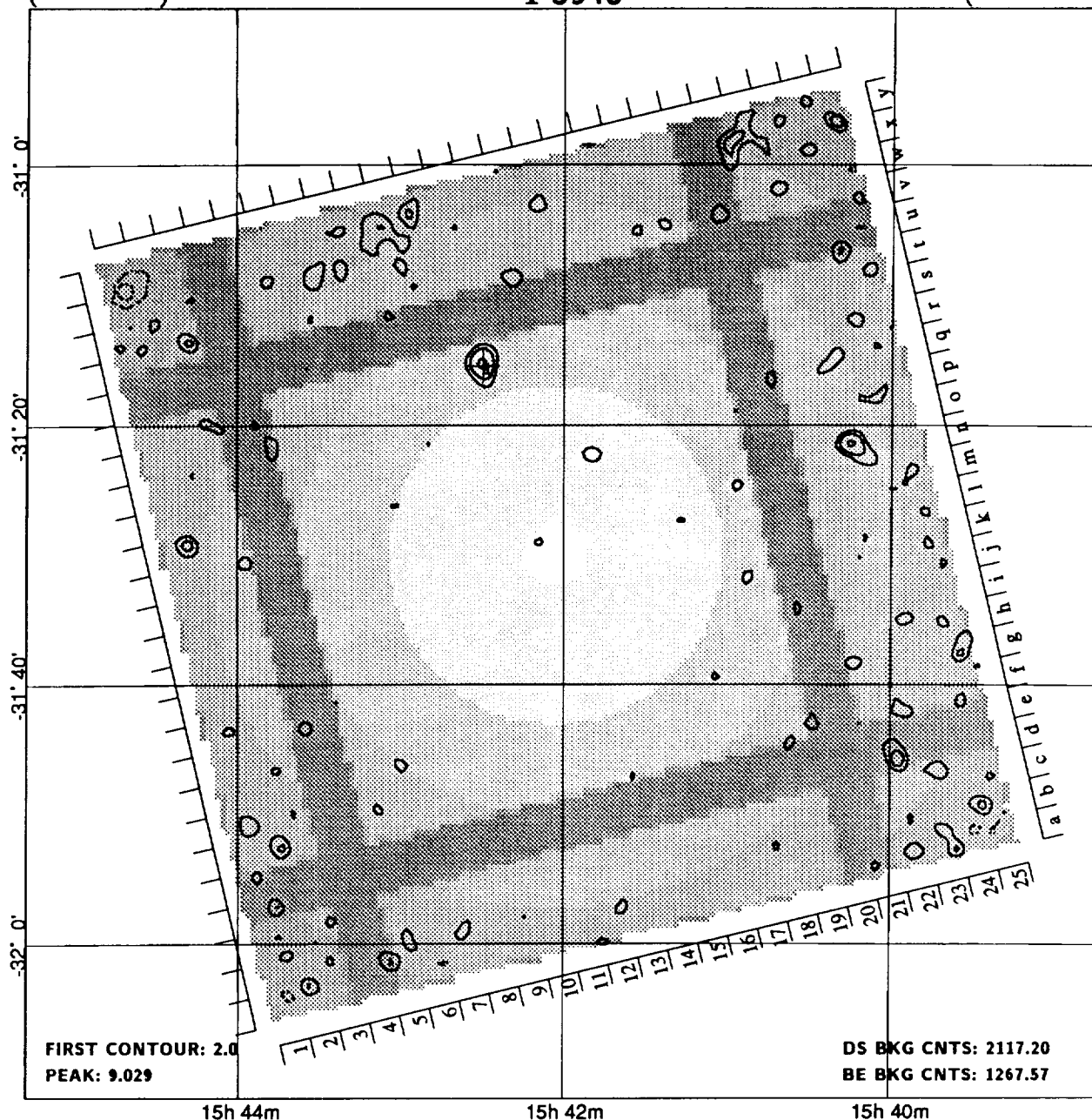
NH:  $7.6\text{E}+20$   
REF/ID:  
FIELD FLAGS: L



(15h 42m)

I 3948

(15h 42m)



## H1540-32: EXTENDED SOFT SOURCE/POSSIBLE OLD SNR

FIELD CENTER:  $15^{\text{h}}42^{\text{m}}00.0^{\text{s}}$   $-31^{\circ}29'59''$  (B1950)  
 $15^{\text{h}}45^{\text{m}}07.7^{\text{s}}$   $-31^{\circ}39'21''$  (J2000)  
 $l: 340.93$   $b: 18.11$

DATE: 1980/ 51 - 1980/ 51  
 LIVETIME: 1715.6s  
 ROLL ANGLE:  $-103.5^{\circ}$

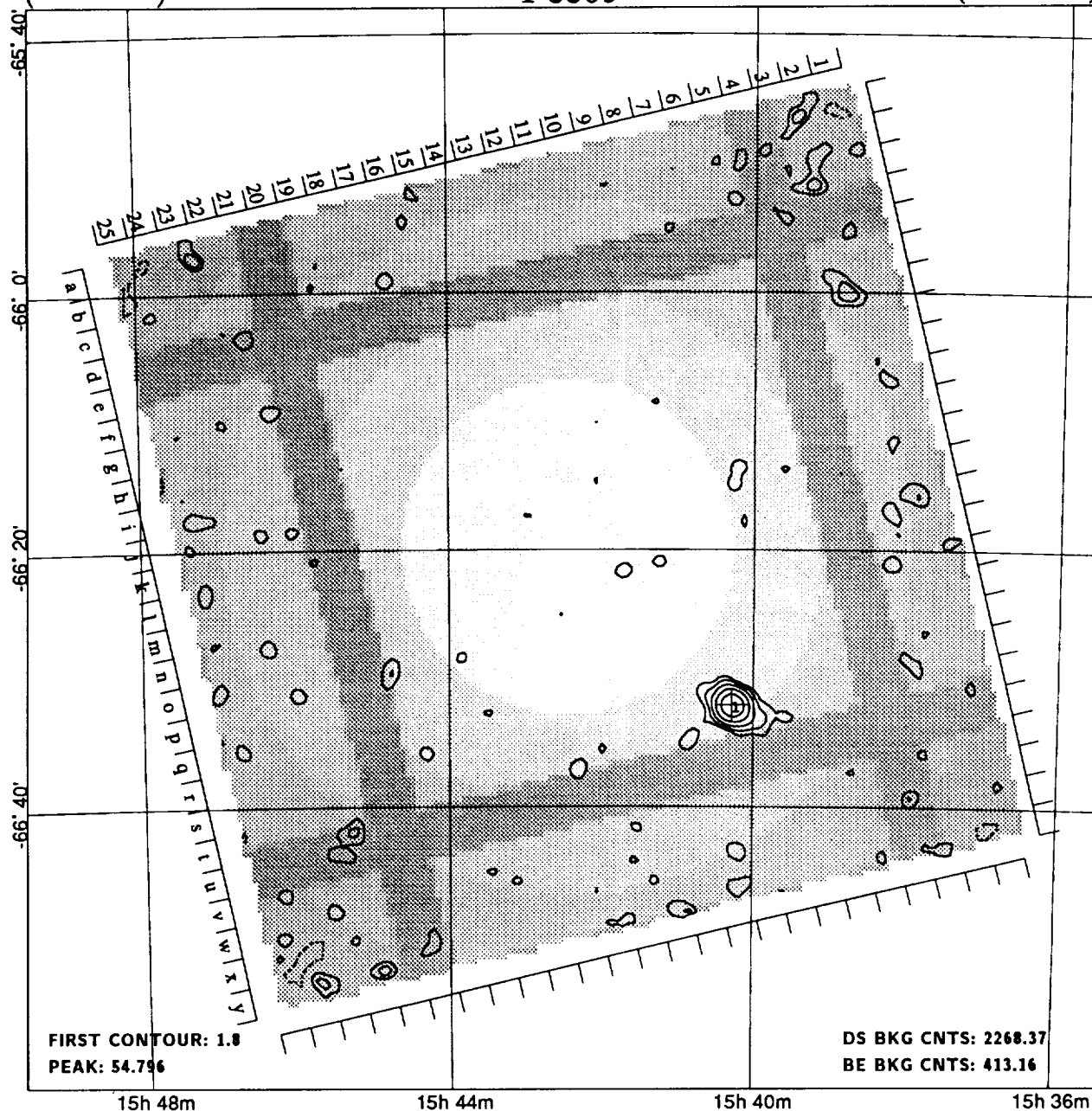
NH:  $7.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3492	1L	15 42 29.8	-31 15 30	51	0.0292	0.0067	29.1	4.9	4.2	0.8	200	15.8	

(15h 42m)

I 3309

(15h 42m)



## SYMBIOTIC STARS: HEN 1092

FIELD CENTER:  $15^{\text{h}}42^{\text{m}}29.9^{\text{s}}$   $-66^{\circ}19'58''$  (B1950) $15^{\text{h}}47^{\text{m}}10.8^{\text{s}}$   $-66^{\circ}29'16''$  (J2000) $l: 319.22$   $b: -9.35$ 

DATE: 1979/239 - 1979/239

LIVETIME: 1838.1s

ROLL ANGLE:  $77.0^{\circ}$ NH:  $1.3\text{E}+21$ 

REF/ID: S

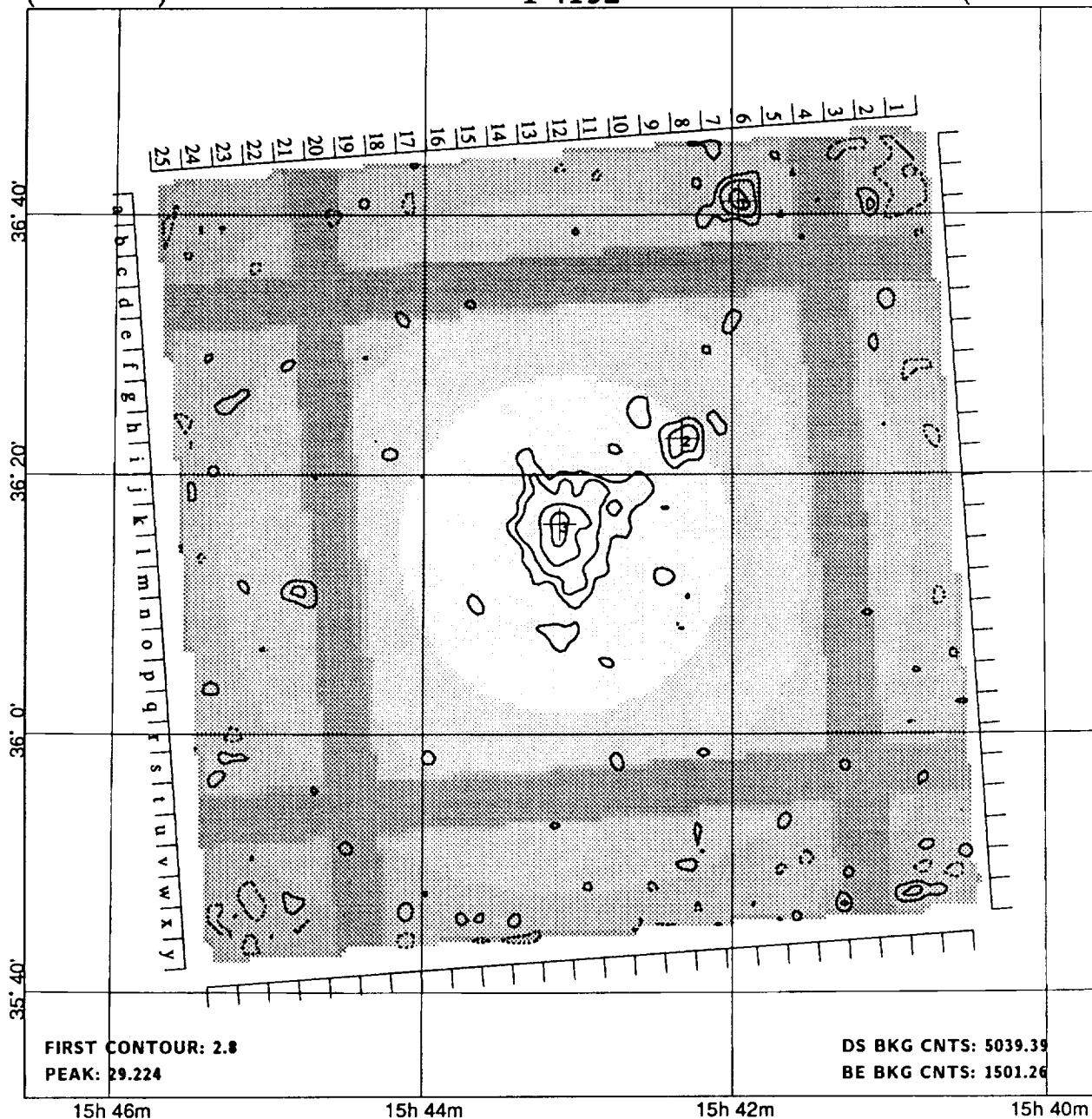
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3487	1	15 40 17.1	-66 32 05	47	0.141	0.012	141.9	5.1	11.7	1.1	0	17.7	H	

(15h 43m)

I 4192

(15h 43m)



## A 2124, CLUSTER WITH WELL-STUDIED OPTICAL PROPERTIES

FIELD CENTER:  $15^{\text{h}}43^{\text{m}}06.0^{\text{s}}$   $36^{\circ}13'59''$  (B1950)  
 $15^{\text{h}}44^{\text{m}}59.3^{\text{s}}$   $36^{\circ}04'39''$  (J2000)  
 $\ell$ : 57.71  $b$ : 52.30

DATE: 1979/237 - 1979/237  
 LIVETIME: 4083.6s  
 ROLL ANGLE:  $85.9^{\circ}$

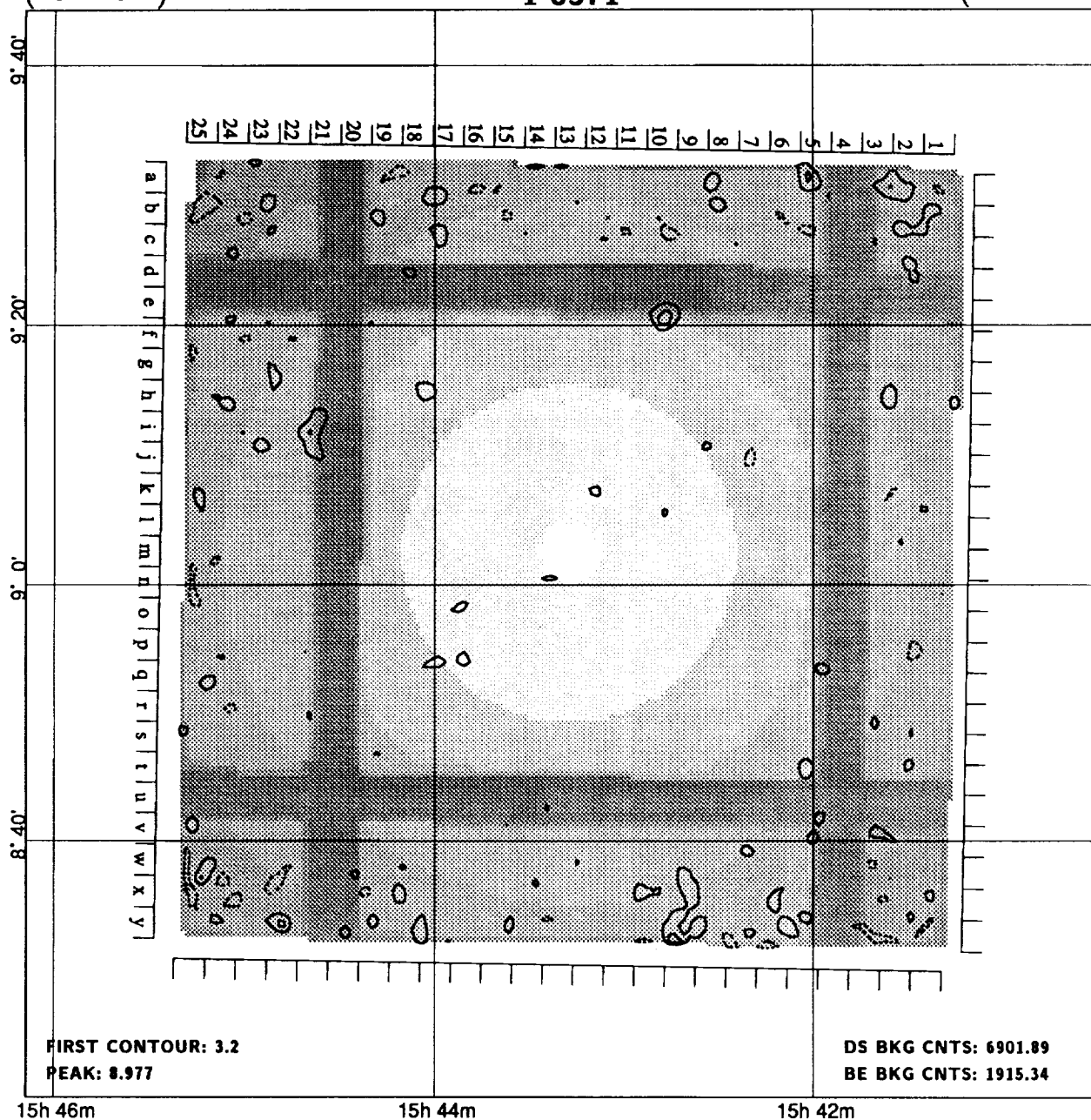
NH:  $1.8\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3490	1	15 41 57.4	36 41 01	53	0.0241	0.0046	35.0	10.0	5.2	2.0	0	31.7	H	
3491	2	15 42 19.5	36 22 47	42	0.0143	0.0028	37.2	14.8	5.2	1.1	0	12.8	H	
3494	3	15 43 07.0	36 16 09	31	0.0439	0.0041	132.7	19.3	10.8	3.6	0	2.0	H	CLG

(15h 43m)

I 8371

(15h 43m)



1543+091, EXTREME STAR FORMATION

FIELD CENTER:  $15^{\text{h}}43^{\text{m}}19.0^{\text{s}}\ 09^{\circ}02'17''$  (B1950)  
 $15^{\text{h}}45^{\text{m}}44.0^{\text{s}}\ 08^{\circ}52'59''$  (J2000)  
 $l: 17.42\ b: 45.03$

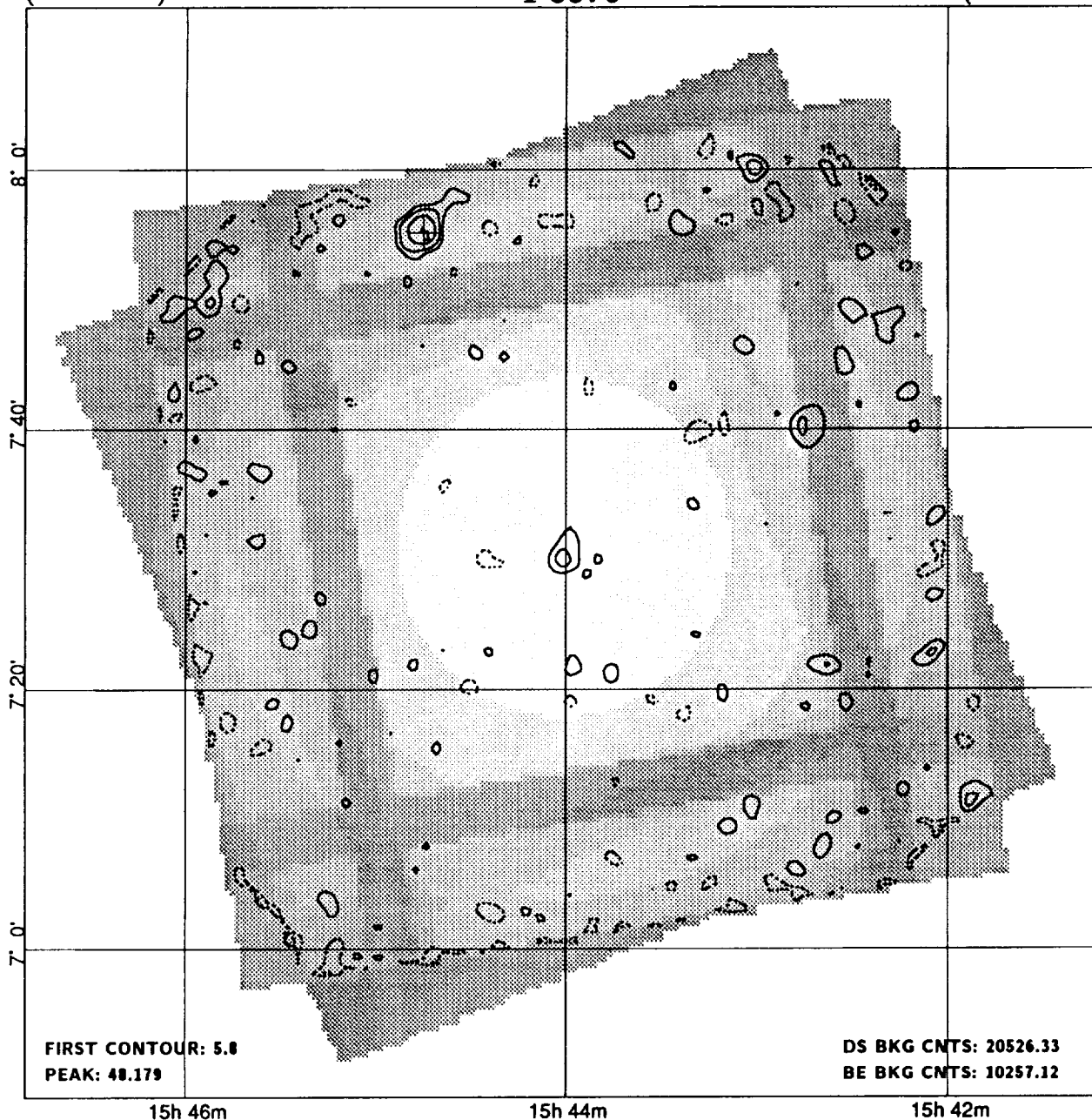
DATE: 1980/239 - 1980/239  
 LIVETIME: 5592.8s  
 ROLL ANGLE:  $90.9^{\circ}$

NH:  $3.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(15h 44m)

I 5576

(15h 44m)



Lambda SER

FIELD CENTER:  $15^{\text{h}}44^{\text{m}}01.0^{\text{s}}$   $07^{\circ}30'29''$  (B1950)  
 $15^{\text{h}}46^{\text{m}}27.5^{\text{s}}$   $07^{\circ}21'14''$  (J2000)  
 $l: 15.70$   $b: 44.10$

DATE: 1980/240 - 1981/ 26  
 LIVETIME: 16633.1s

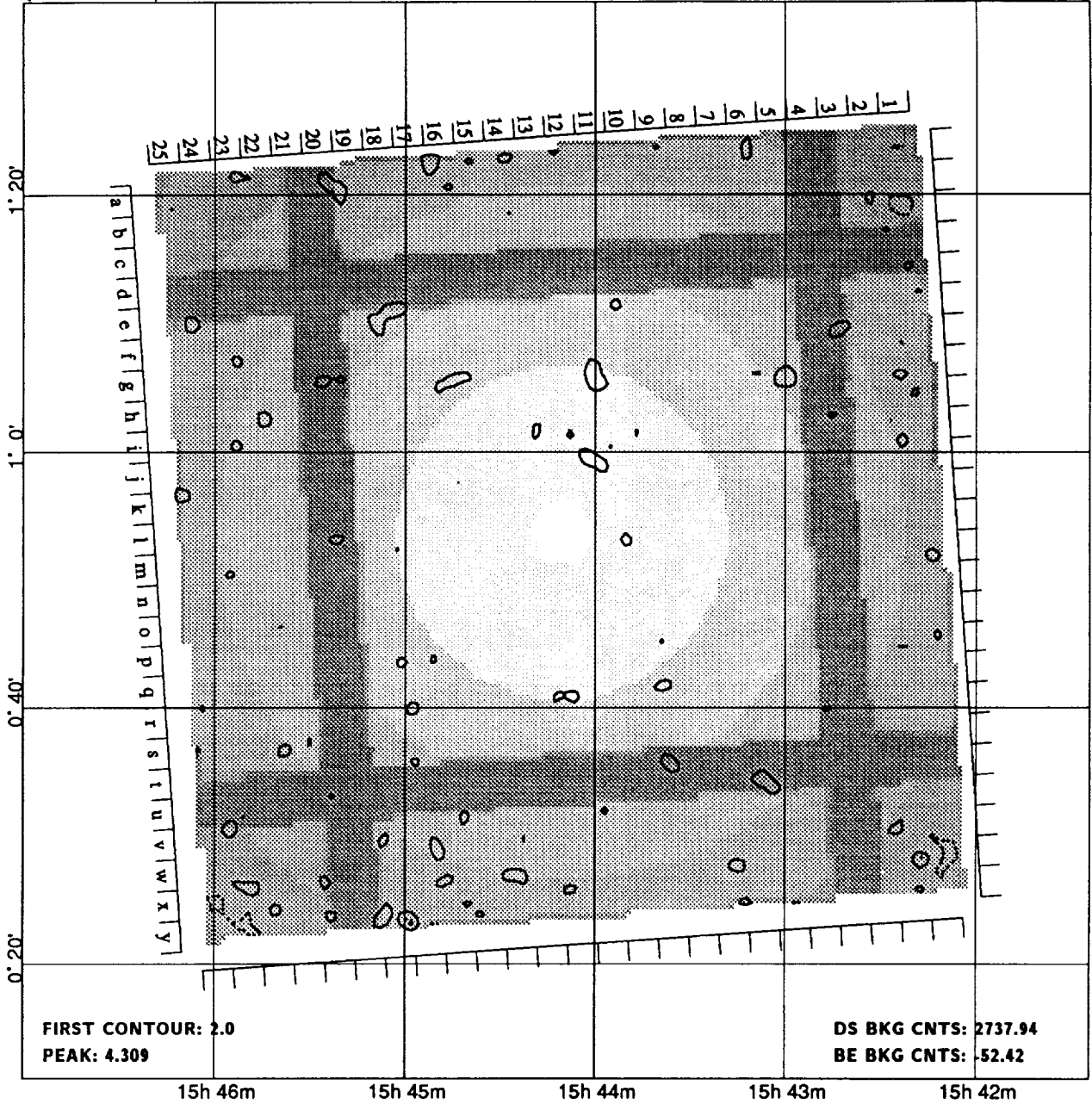
NH:  $3.4\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3497	1L	15 44 45.3	07 55 08	50	0.0124	0.0022	83.3	69.7	5.4	1.2	0	26.8		

(15h 44m)

I 3174

(15h 44m)



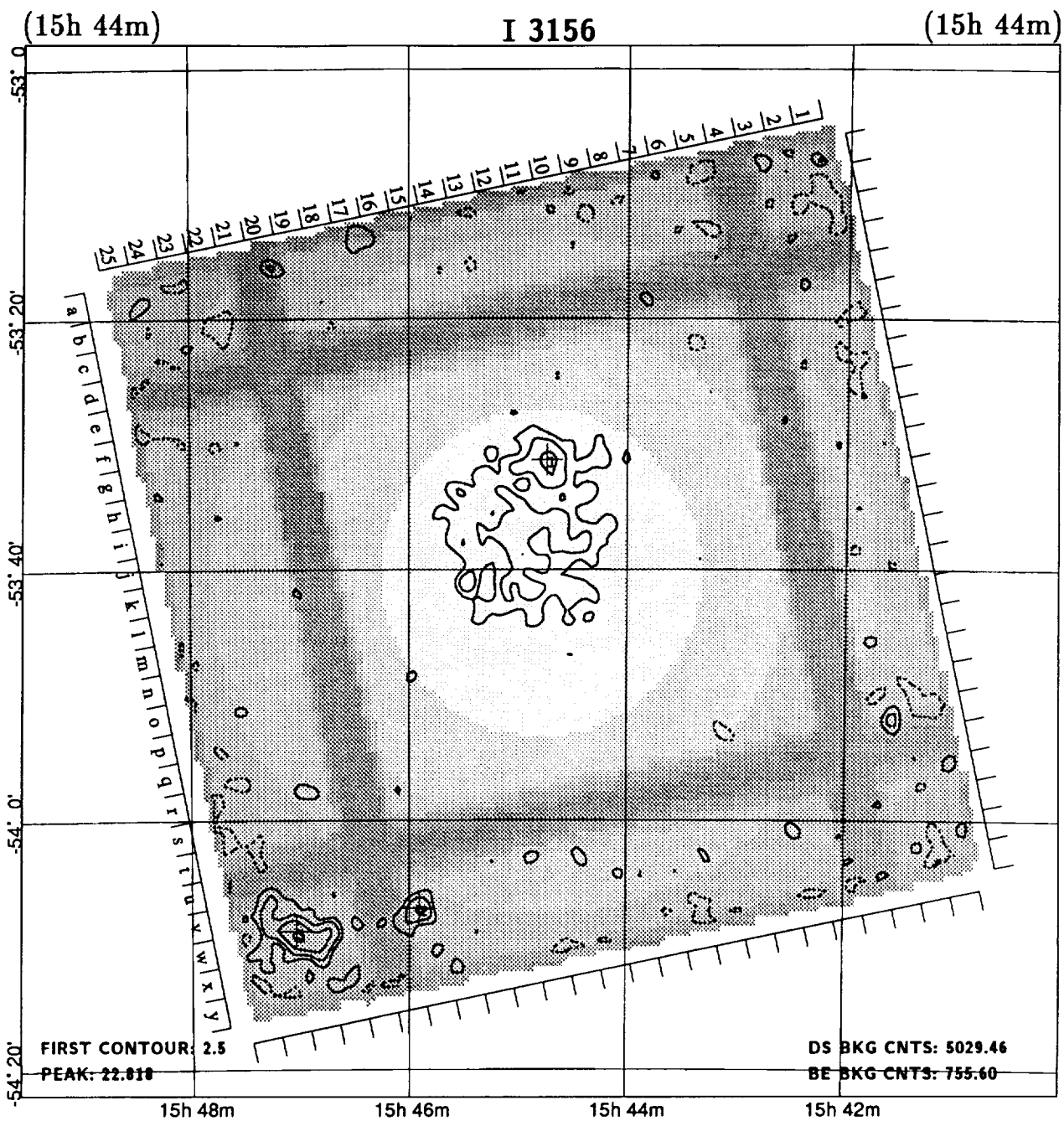
## EG113: NEW WHITE DWARF X-RAY SOURCES

FIELD CENTER:  $15^{\text{h}}44^{\text{m}}12.0^{\text{s}}$   $00^{\circ}52'59''$  (B1950)  
 $15^{\text{h}}46^{\text{m}}44.9^{\text{s}}$   $00^{\circ}43'44''$  (J2000)  
 $l: 8.29$   $b: 40.38$

DATE: 1979/228 - 1979/228  
 LIVETIME: 2218.6s  
 ROLL ANGLE:  $86.1^{\circ}$

NH:  $6.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:





SNR NEAR COS-B GAMMA RAY SOURCES

FIELD CENTER: 15<sup>h</sup>44<sup>m</sup>48.0<sup>s</sup> -53°40'11" (B1950)  
15<sup>h</sup>48<sup>m</sup>37.9<sup>s</sup> -53°49'22" (J2000)  
 $l$ : 327.28  $b$ : 0.45

DATE: 1979/242 - 1979/242  
LIVETIME: 4075.5s  
ROLL ANGLE: 78.3°

NH: 1.5E+21  
REF/ID:  
FIELD FLAGS: D

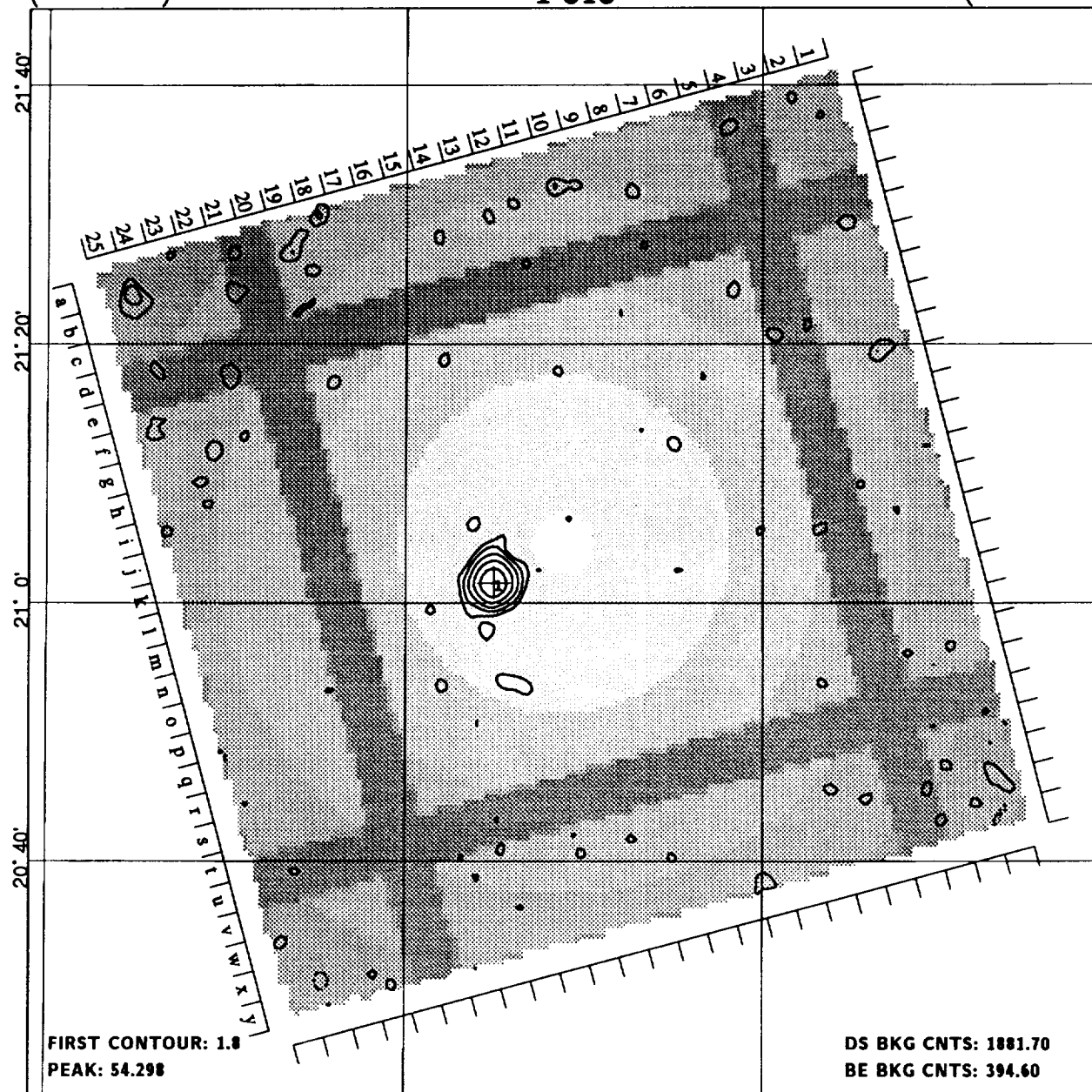
CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3496	1	15 44 43.9	-53 31 11	41	0.0175	0.0028	48.2	12.8	6.2	9.8	0	9.2	H
3501	2	15 45 54.3	-54 07 03	55	*0.0122	0.0034	18.6	8.4	3.6	0.9	601	28.5	
3505	3	15 47 02.5	-54 08 55	51	0.0276	0.0055	30.6	6.4	5.0	2.1	0	34.7	A



(15h 45m)

I 315

(15h 45m)



15h 48m

15h 46m

15h 44m

## ZW 1545 CLUSTERS WITH WELL STUDIED OPTICAL PROPERTIES

FIELD CENTER: 15<sup>h</sup>45<sup>m</sup>06.0<sup>s</sup> 21°03'59" (B1950)15<sup>h</sup>47<sup>m</sup>18.3<sup>s</sup> 20°54'47" (J2000) $l$ : 33.91  $b$ : 49.56

DATE: 1979/225 - 1979/225

LIVETIME: 1524.8s

ROLL ANGLE: 75.0°

NH: 4.3E+20

REF/ID:

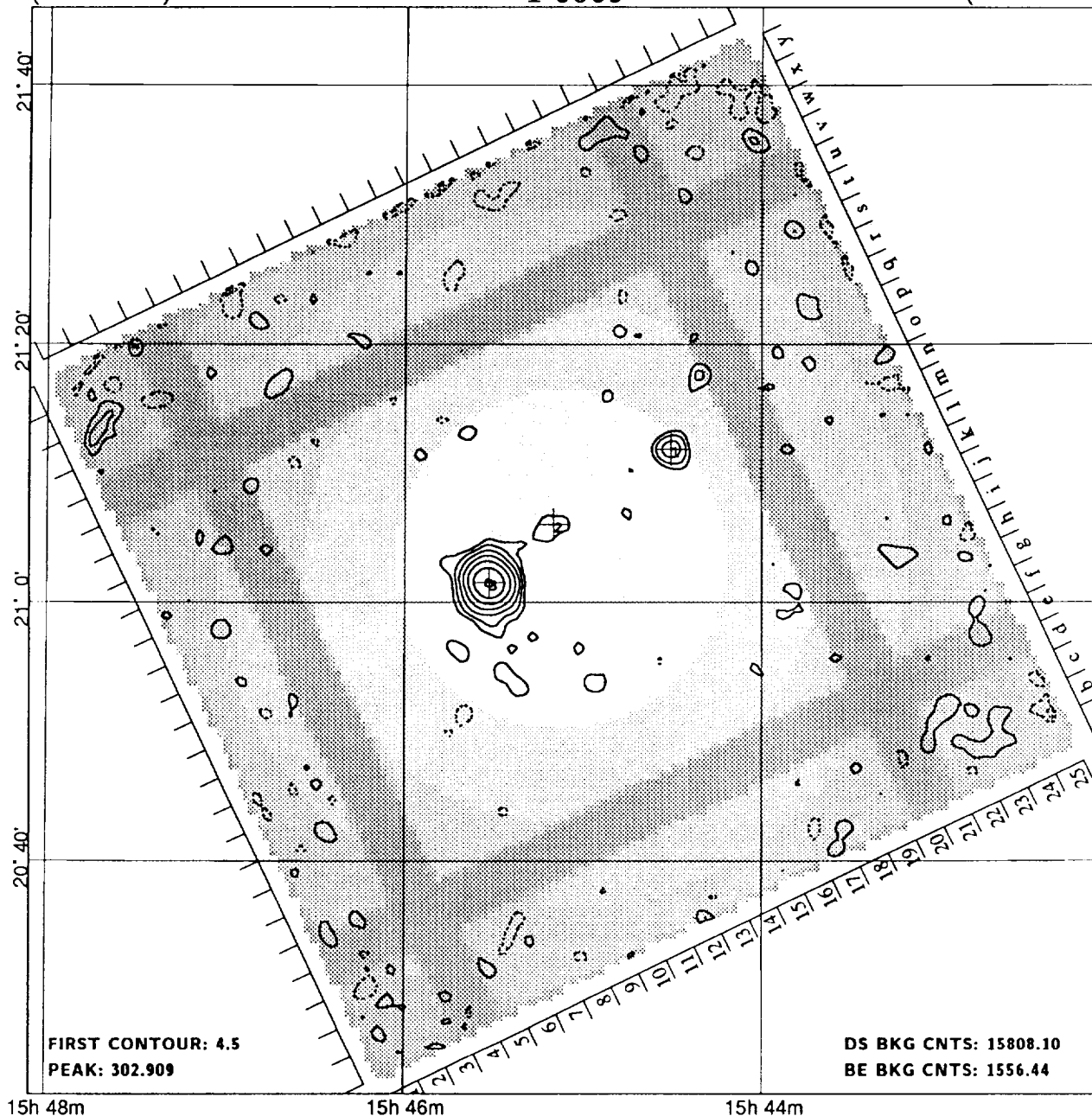
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3500	1	15 45 30.4	21 01 34	38	0.206	0.014	220.5	5.5	14.7	1.2	0	6.2	AH	*

(15h 45m)

I 6069

(15h 45m)

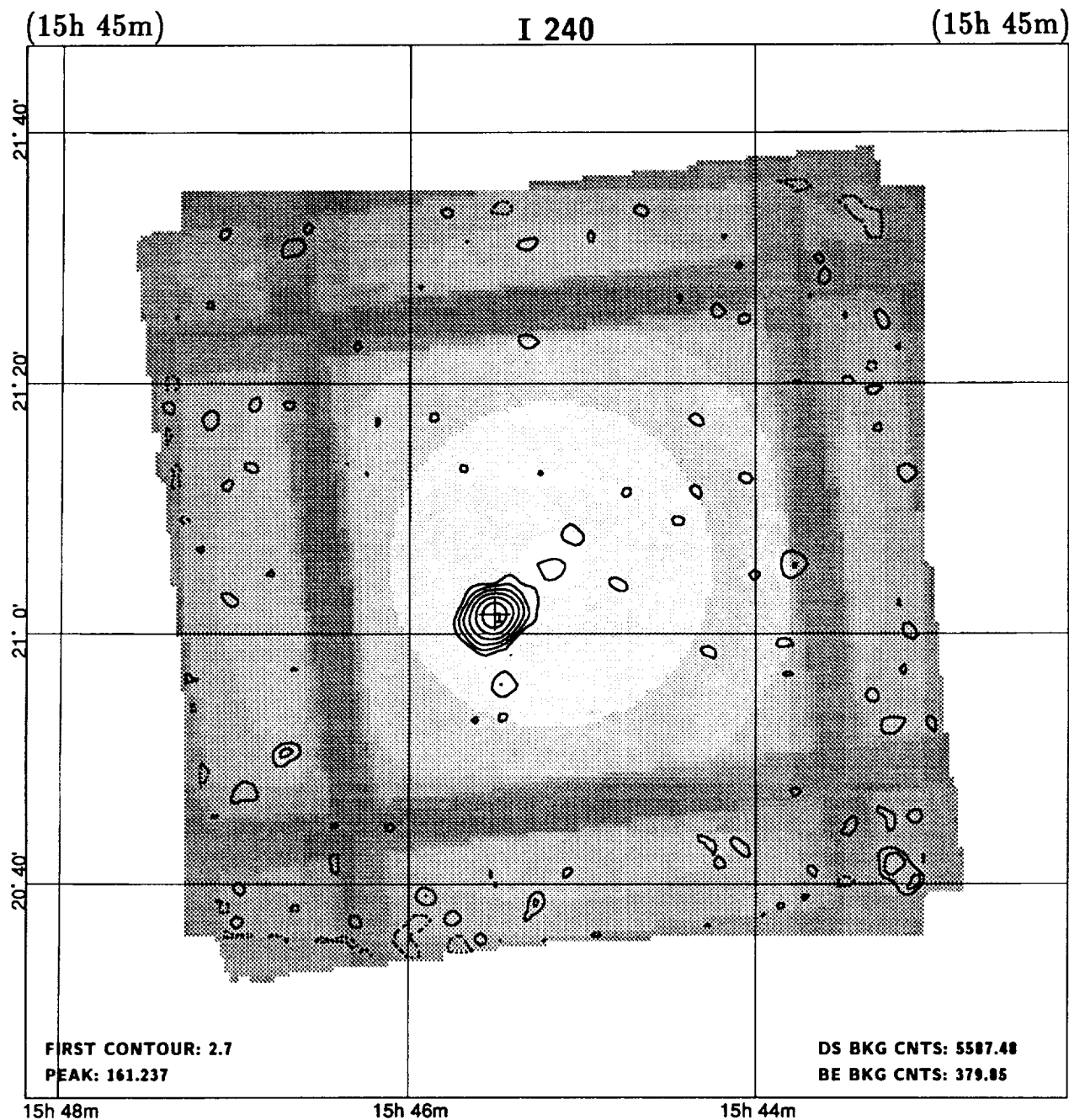


FIELD CENTER:  $15^h 45^m 06.0^s$   $21^\circ 03' 59''$  (B1950)  
 $15^h 47^m 18.3^s$   $20^\circ 54' 47''$  (J2000)  
 $l: 33.91$   $b: 49.56$

DATE: 1980/ 24 - 1980/ 25  
 LIVETIME: 12809.9s  
 ROLL ANGLE:  $-115.6^\circ$

NH:  $4.3E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3495	1	15 44 30.4	21 11 53	38	0.0104	0.0013	84.8	36.2	7.7	0.8	0	11.3	H	
3498	2	15 45 09.9	21 06 06	37	0.00369	0.00096	34.5	46.5	3.8	0.7	0	2.4		
3500	3	15 45 31.6	21 01 33	37	0.1414	0.0040	1279.0	43.0	35.2	1.3	0	6.4	AH	*



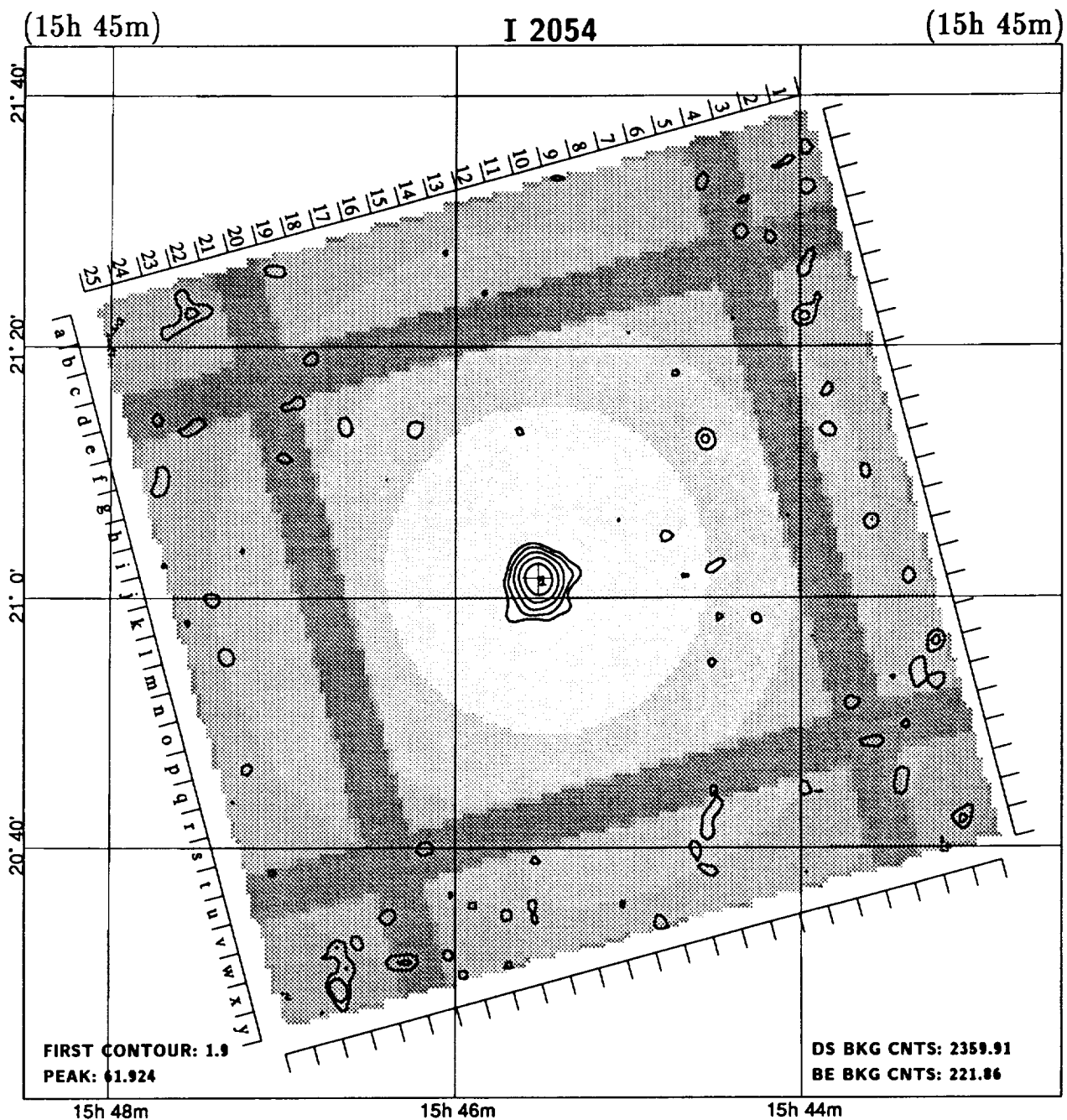
**ZWC 1545+21 CLUSTER EVOLUTION**

FIELD CENTER:  $15^{\text{h}}45^{\text{m}}12.0^{\text{s}}$   $21^{\circ}04'59''$  (B1950)  
 $15^{\text{h}}47^{\text{m}}24.3^{\text{s}}$   $20^{\circ}55'47''$  (J2000)  
 $l$ : 33.95  $b$ : 49.55

DATE: 1979/238 - 1979/238  
 LIVETIME: 4527.7s

NH:  $4.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3500	1	15 45 30.4	21 01 31	37	0.1910	0.0078	609.7	13.3	24.4	1.2	0	5.5	AH	*



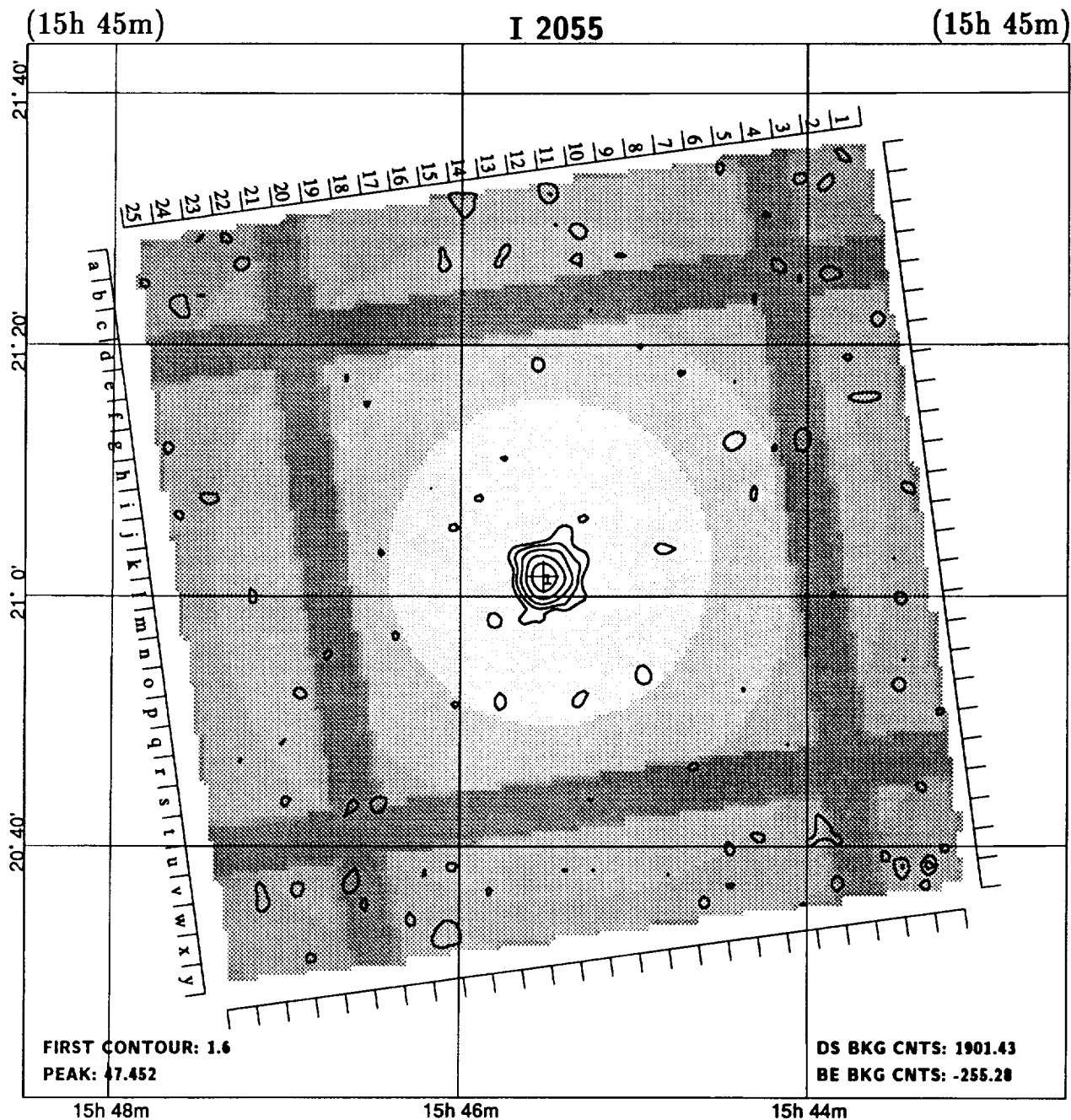
X-RAY STUDY OF QUASARS: 3C323.1=4C21.45

FIELD CENTER: 15<sup>h</sup>45<sup>m</sup>30.0<sup>s</sup> 21°01'59'' (B1950)  
15<sup>h</sup>47<sup>m</sup>42.4<sup>s</sup> 20°52'49'' (J2000)  
 $l$ : 33.91  $b$ : 49.46

DATE: 1979/225 - 1979/225  
LIVETIME: 1912.3s  
ROLL ANGLE: 75.1°

NH: 4.3E+20  
REF/ID:  
FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3500	1	15 45 31.2	21 01 36	31	0.191	0.012	271.2	6.8	16.3	1.3	0	0.6	AH	*



X-RAY STUDY OF QUASARS: 3C323.1=4C21.45

FIELD CENTER:  $15^h 45^m 30.0^s$   $21^\circ 01' 59''$  (B1950)  
 $15^h 47^m 42.4^s$   $20^\circ 52' 49''$  (J2000)  
 $\ell$ : 33.91  $b$ : 49.46

DATE: 1979/242 - 1979/242  
 LIVETIME: 1540.8s  
 ROLL ANGLE:  $82.2^\circ$

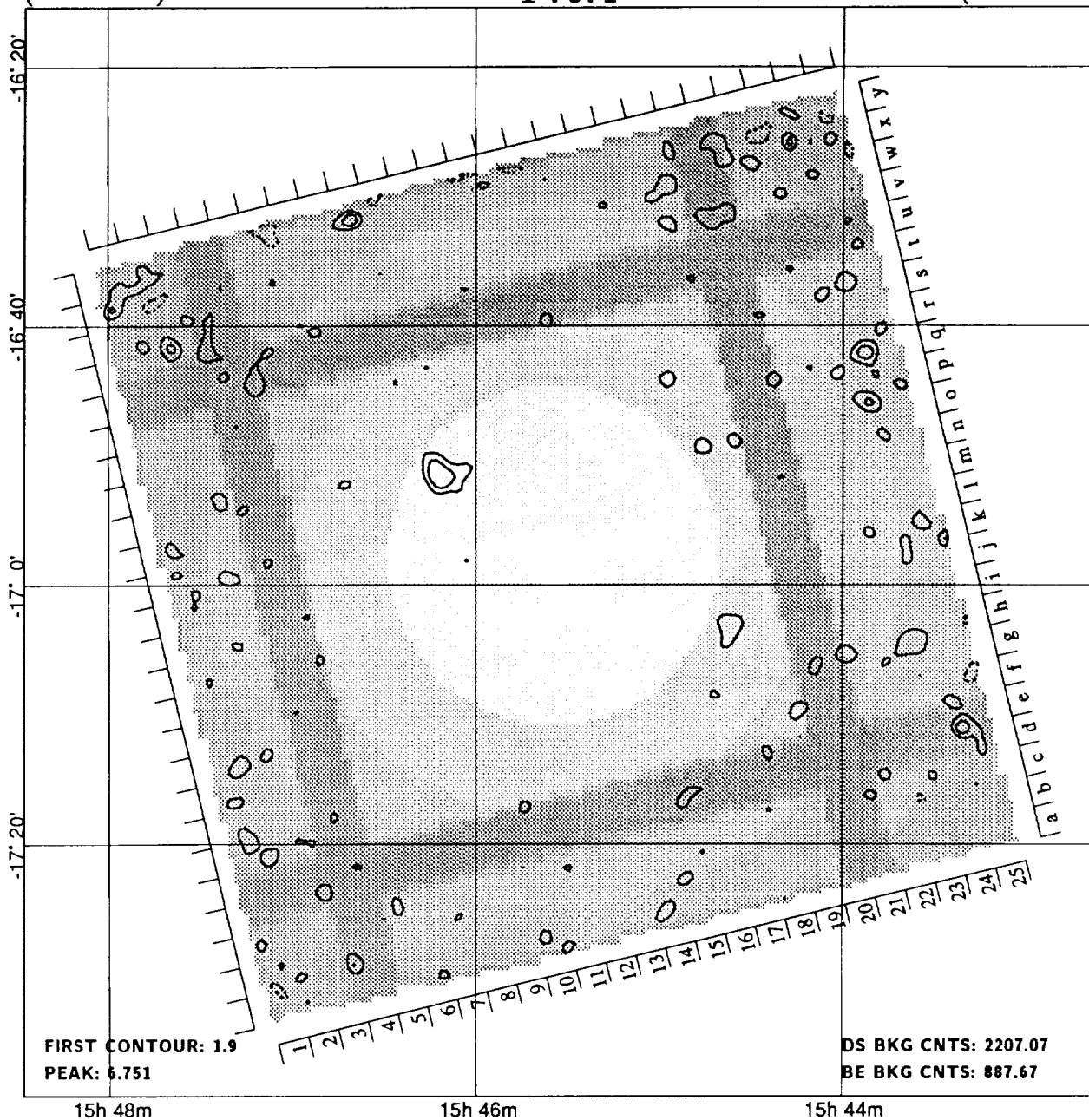
NH:  $4.3E+20$   
 REF/ID:  
 FIELD FLAGS: C

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3500	1	15 45 31.3	21 01 34	31	0.164	0.012	187.1	3.9	13.5	1.4	0	0.6	AH	*

(15h 45m)

I 7671

(15h 45m)



H1543-16, POSITION 2

FIELD CENTER:  $15^{\text{h}}45^{\text{m}}32.0^{\text{s}}$   $-16^{\circ}57'29''$  (B1950)  
 $15^{\text{h}}48^{\text{m}}22.9^{\text{s}}$   $-17^{\circ}06'39''$  (J2000)  
 $l: 352.20$   $b: 28.38$

DATE: 1981/ 32 - 1981/ 32  
 LIVETIME: 1788.5s  
 ROLL ANGLE:  $-103.6^{\circ}$

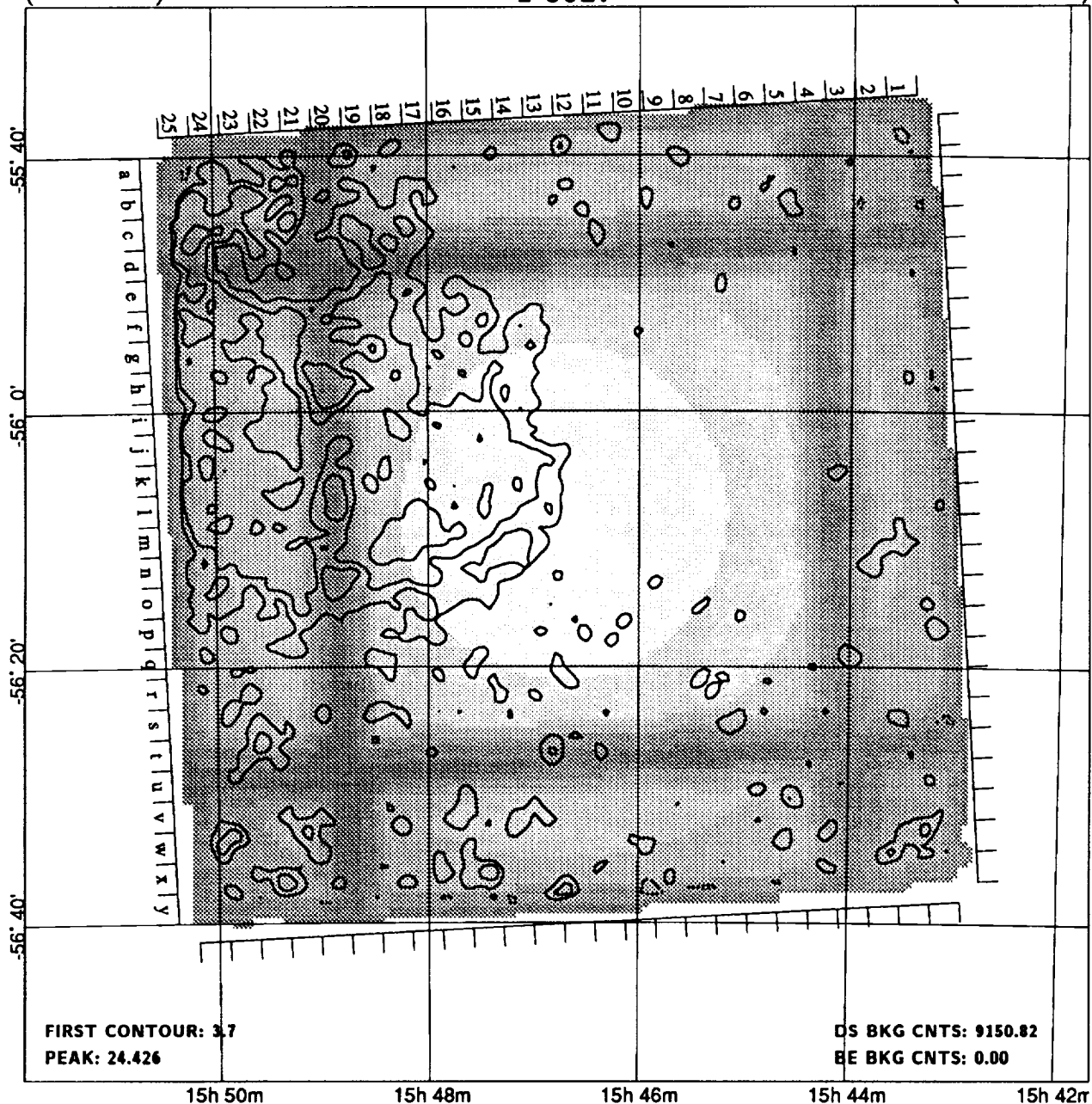
NH:  $9.2\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L



(15h 46m)

I 8027

(15h 46m)



FIELD CENTER:  $15^h 46^m 46.0^s$   $-56^\circ 10' 29''$  (B1950)  
 $15^h 50^m 43.8^s$   $-56^\circ 19' 32''$  (J2000)  
 $l: 325.95$   $b: -1.69$

DATE: 1980/227 - 1980/228  
 LIVETIME: 7415.2s  
 ROLL ANGLE:  $87.0^\circ$

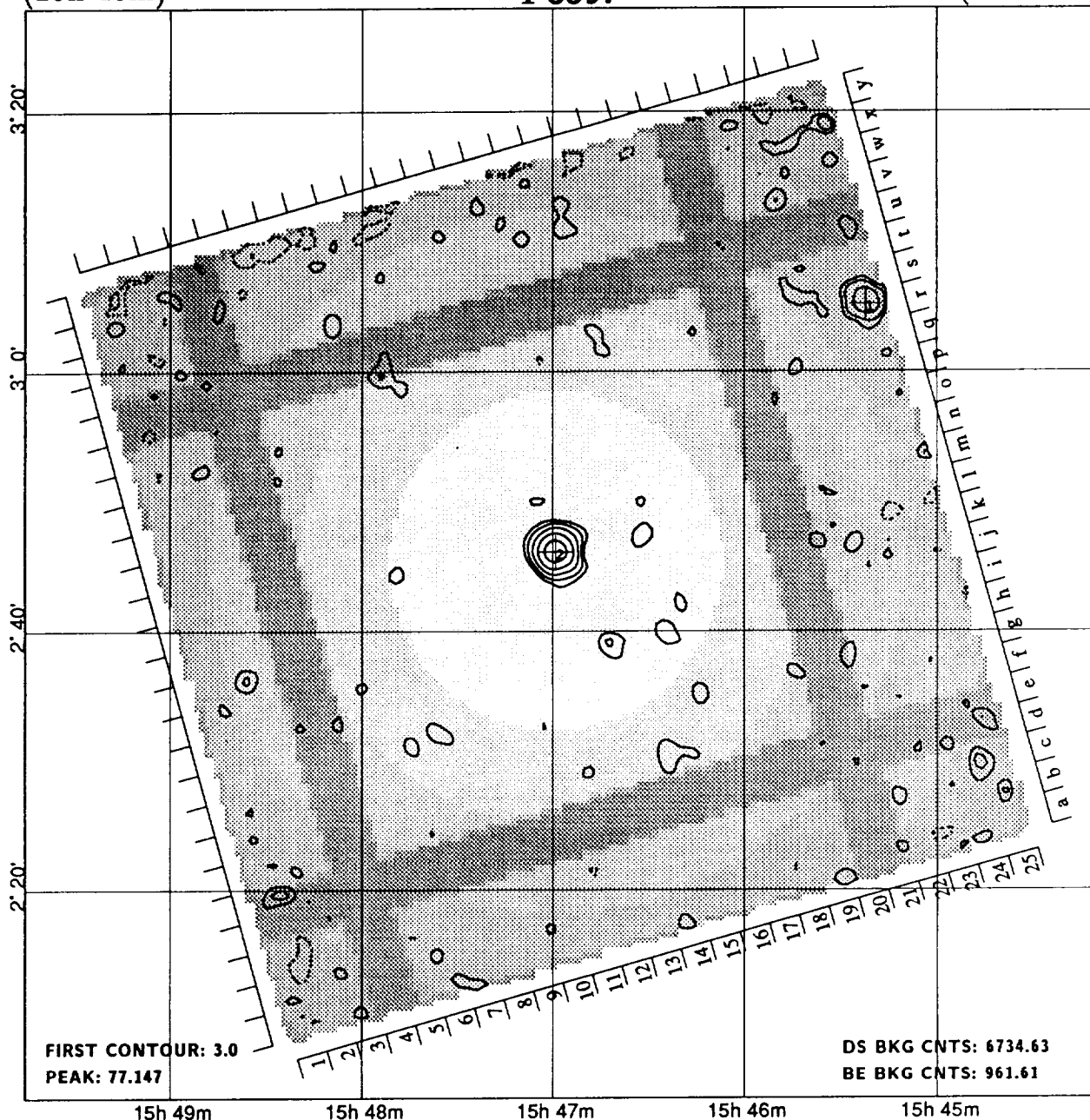
NH:  $1.5E+21$   
 REF/ID:  
 FIELD FLAGS: LS



(15h 46m)

I 5397

(15h 46m)



PKS 1546+027.QSO'S WITH RADIO FLAT SPECTRUM (C.S.)

FIELD CENTER:  $15^{\text{h}}46^{\text{m}}57.2^{\text{s}}$   $02^{\circ}45'53''$  (B1950) $15^{\text{h}}49^{\text{m}}28.3^{\text{s}}$   $02^{\circ}36'48''$  (J2000) $l: 10.84$   $b: 40.91$ 

DATE: 1980/ 39 - 1980/ 39

LIVETIME: 5457.3s

ROLL ANGLE:  $-105.6^{\circ}$ NH:  $6.1\text{E}+20$ 

REF/ID:

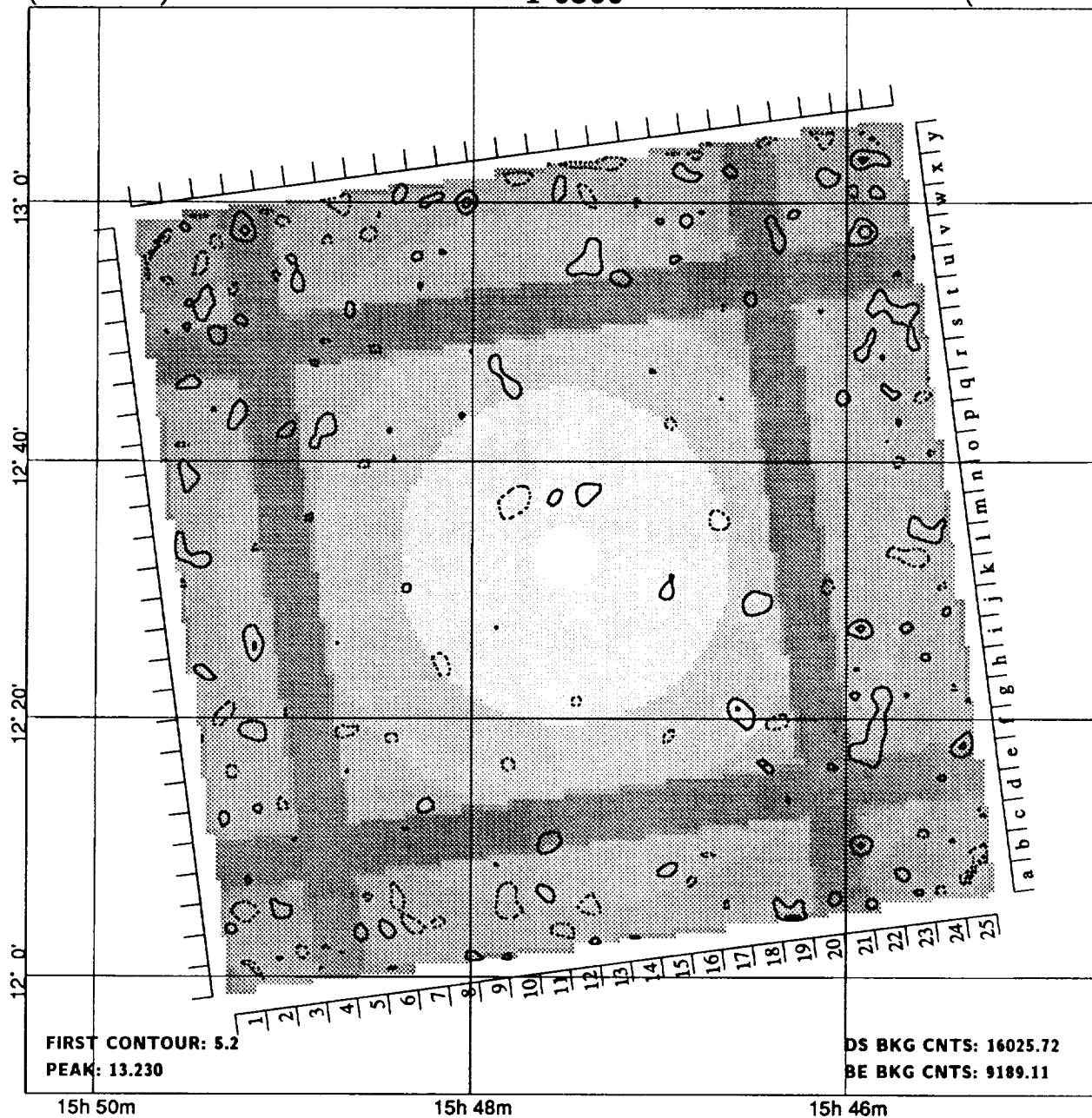
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3499	1	15 45 22.2	03 05 09	51	0.0244	0.0042	43.5	11.5	5.9	1.0	300	30.5	H	
3504	2	15 46 59.2	02 46 04	31	0.0772	0.0045	313.5	18.5	17.2	1.2	0	0.8	H	Q

(15h 47m)

I 6366

(15h 47m)



## I 1141, EMISSION LINE GALAXY SURVEY

FIELD CENTER:  $15^{\text{h}}47^{\text{m}}30.0^{\text{s}}$   $12^{\circ}32'59''$  (B1950)  
 $15^{\text{h}}49^{\text{m}}51.3^{\text{s}}$   $12^{\circ}23'56''$  (J2000)  
 $l: 22.52$   $b: 45.79$

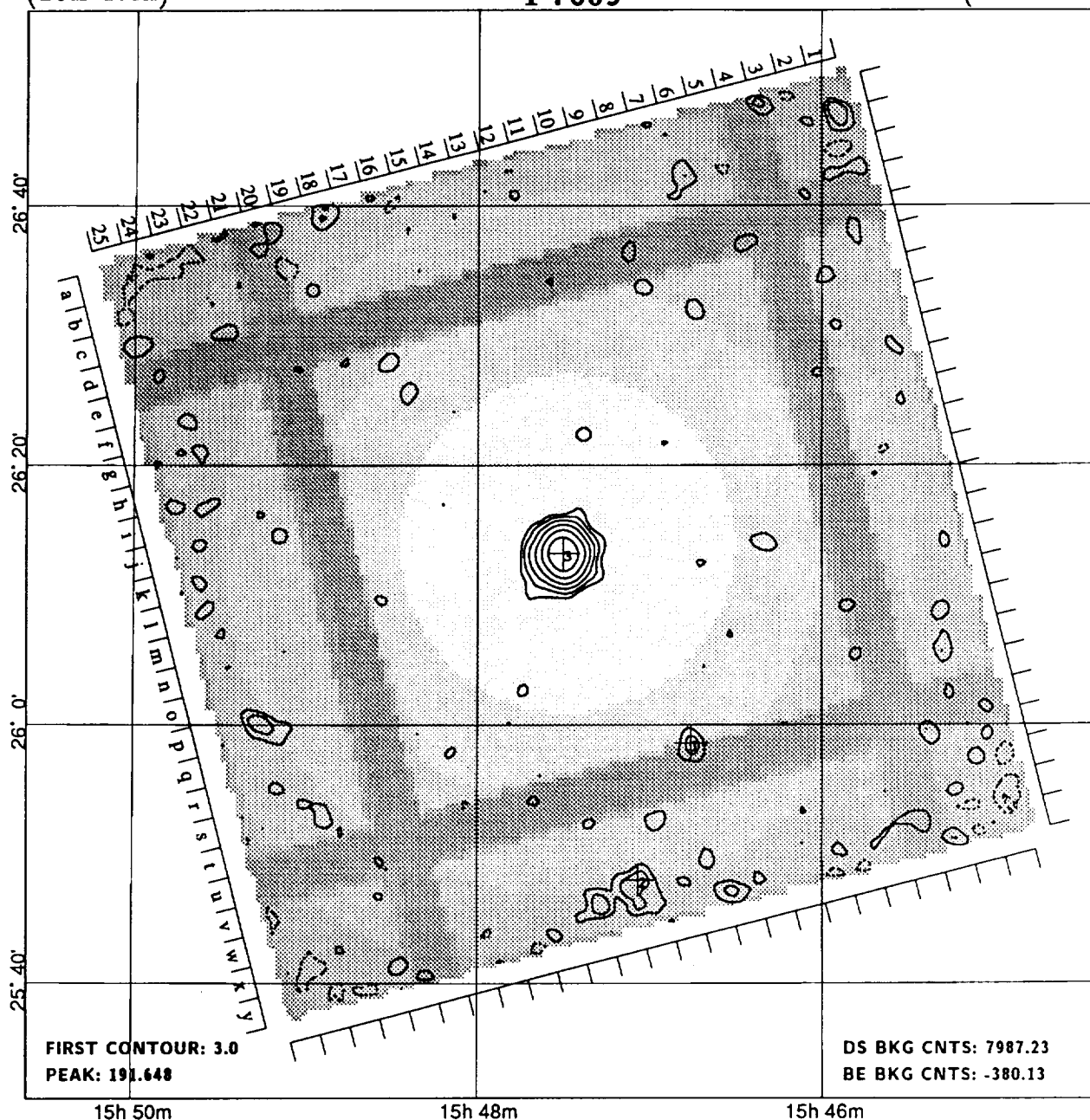
DATE: 1981/ 54 - 1981/ 54  
 LIVETIME: 12986.1s  
 ROLL ANGLE:  $-97.5^{\circ}$

NH:  $3.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L

(15h 47m)

I 7609

(15h 47m)



## HD 141714, SELECTED LATE-TYPE STARS W/CHROMOSPHERIC ACTIVITY

FIELD CENTER:  $15^h 47^m 30.0^s$   $26^\circ 13' 11''$  (B1950)  
 $15^h 49^m 36.2^s$   $26^\circ 04' 08''$  (J2000)  
 $\ell$ : 41.88  $b$ : 50.37

DATE: 1980/226 - 1980/227

NH: 4.1E+20

LIVETIME: 6472.3s

REF/ID:

ROLL ANGLE: 75.6°

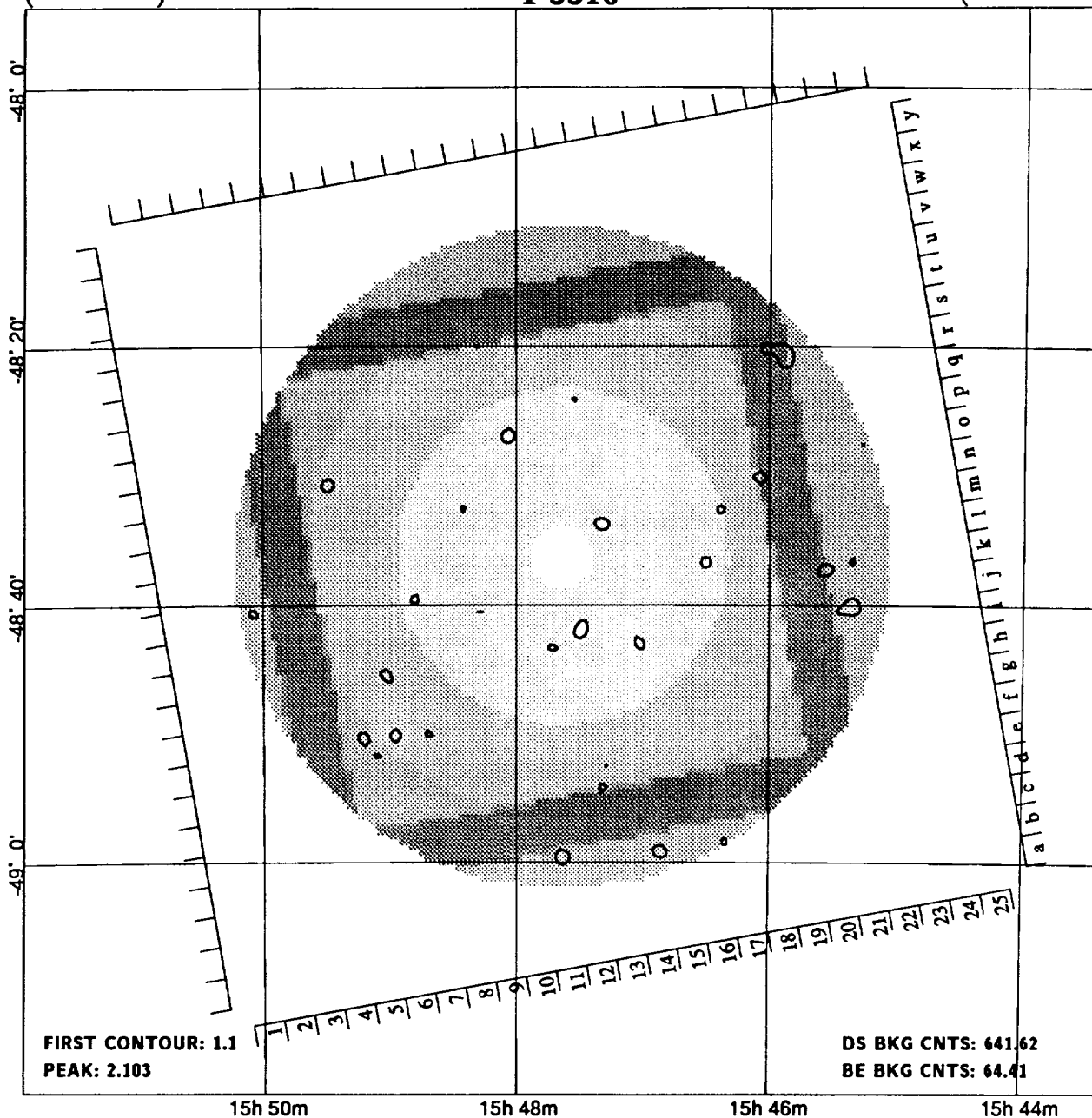
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3502	1	15 46 45.5	25 58 35	55	*0.0064	0.0017	22.5	12.5	3.8	0.6	906	17.9	H
3506	2	15 47 04.0	25 48 01	55	0.0093	0.0024	24.3	13.7	3.9	1.9	0	26.5	H
3507	3	15 47 30.1	26 13 13	31	0.1820	0.0062	876.3	18.7	29.3	1.4	0	0.2	H

(15h 47m)

I 3310

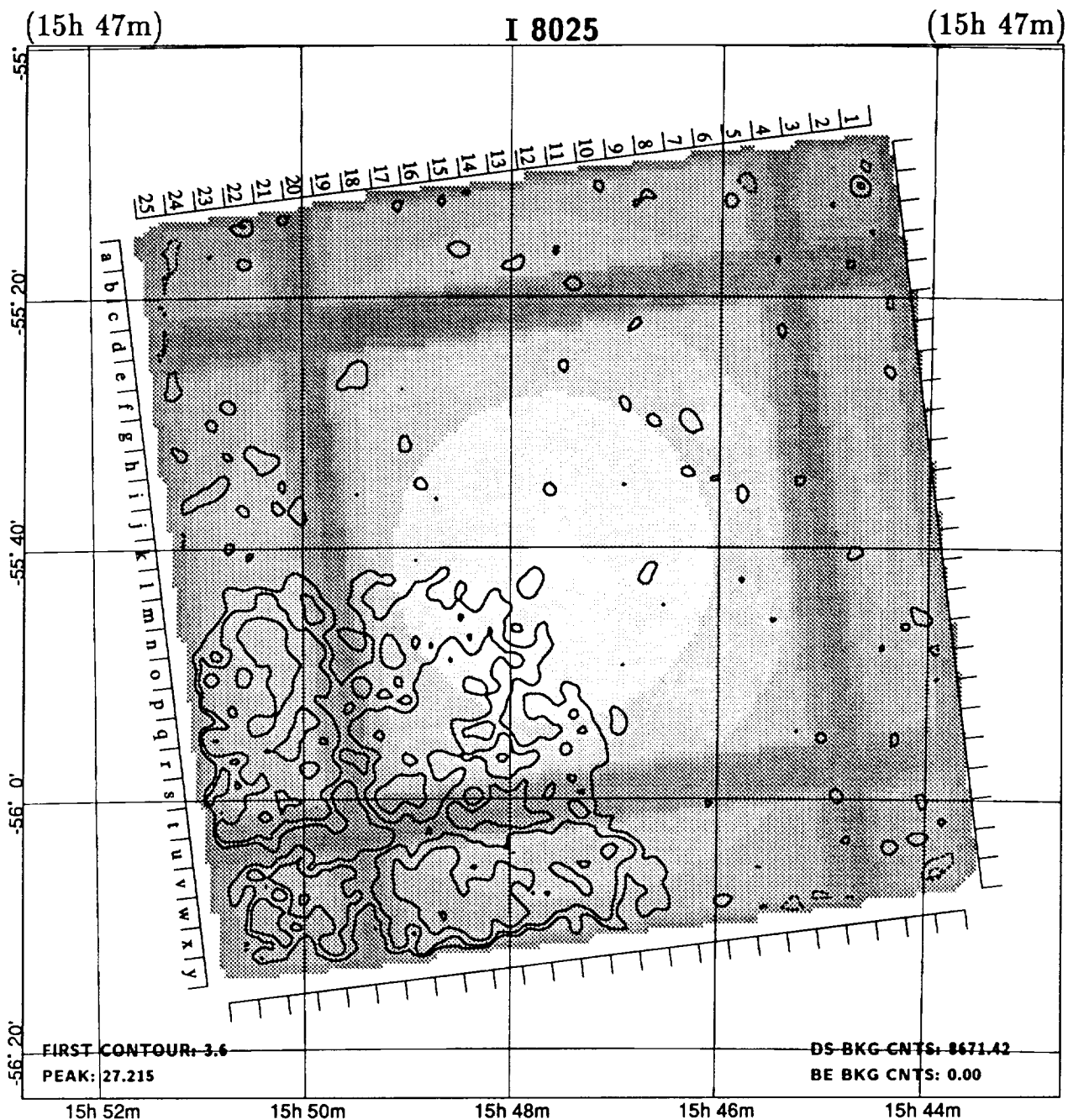
(15h 47m)



FIELD CENTER:  $15^h 47^m 38.0^s$   $-48^\circ 35' 53''$  (B1950)  
 $15^h 51^m 15.7^s$   $-48^\circ 44' 54''$  (J2000)  
 $\ell$ : 330.78  $b$ : 4.15

DATE: 1980/ 50 - 1980/ 50  
LIVETIME: 519.9s  
ROLL ANGLE:  $-100.2^\circ$

NH:  $1.5E+21$   
REF/ID: S  
FIELD FLAGS:



FIELD CENTER: 15<sup>h</sup>47<sup>m</sup>42.0<sup>s</sup> -55°41'59" (B1950)  
15<sup>h</sup>51<sup>m</sup>38.5<sup>s</sup> -55°50'59" (J2000)  
ℓ: 326.35 b: -1.40

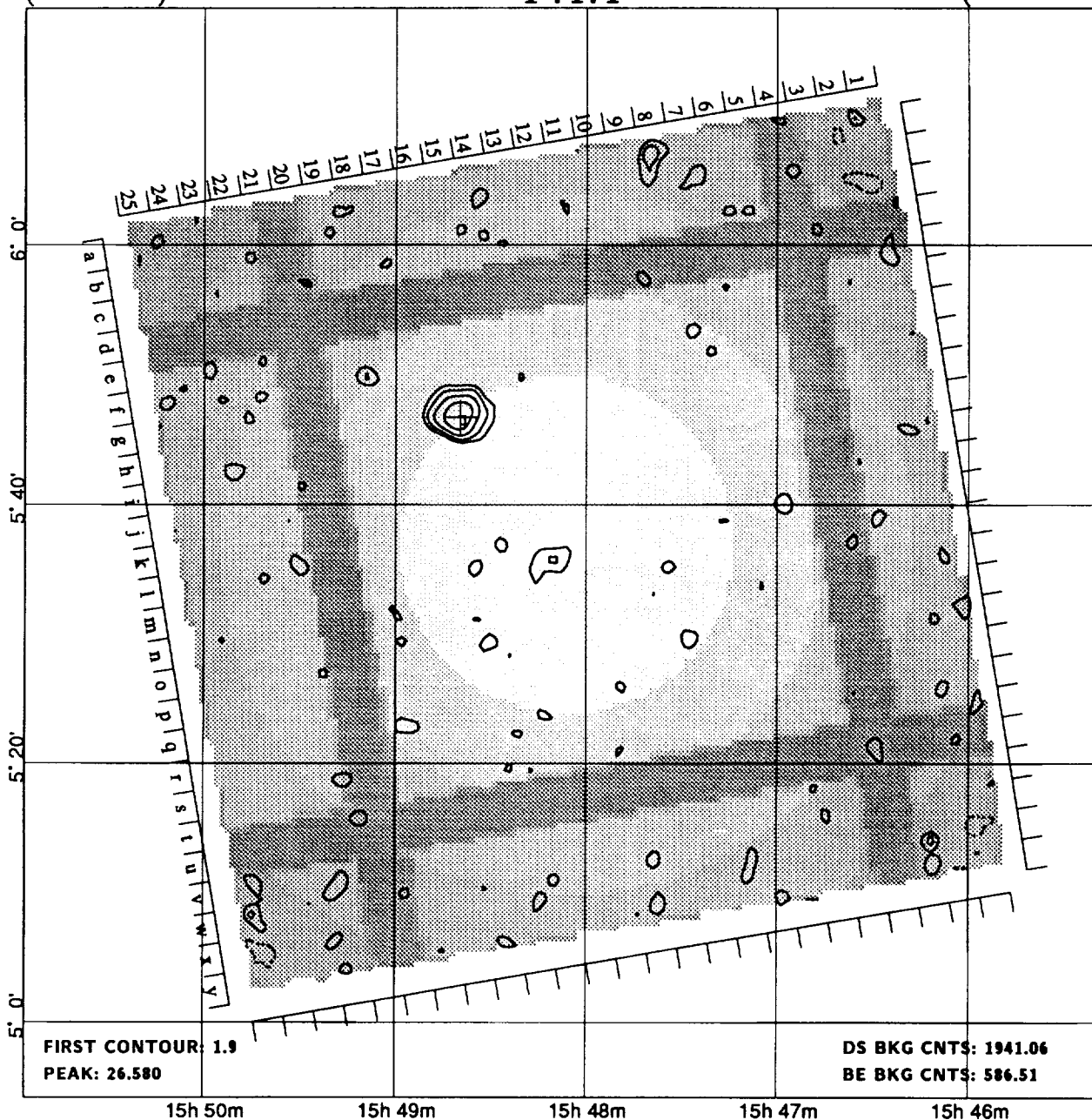
DATE: 1980/229 - 1980/229  
LIVETIME: 7026.7s  
ROLL ANGLE: 82.9°

NH: 1.6E+21  
REF/ID:  
FIELD FLAGS: LS

(15h 48m)

I 7171

(15h 48m)

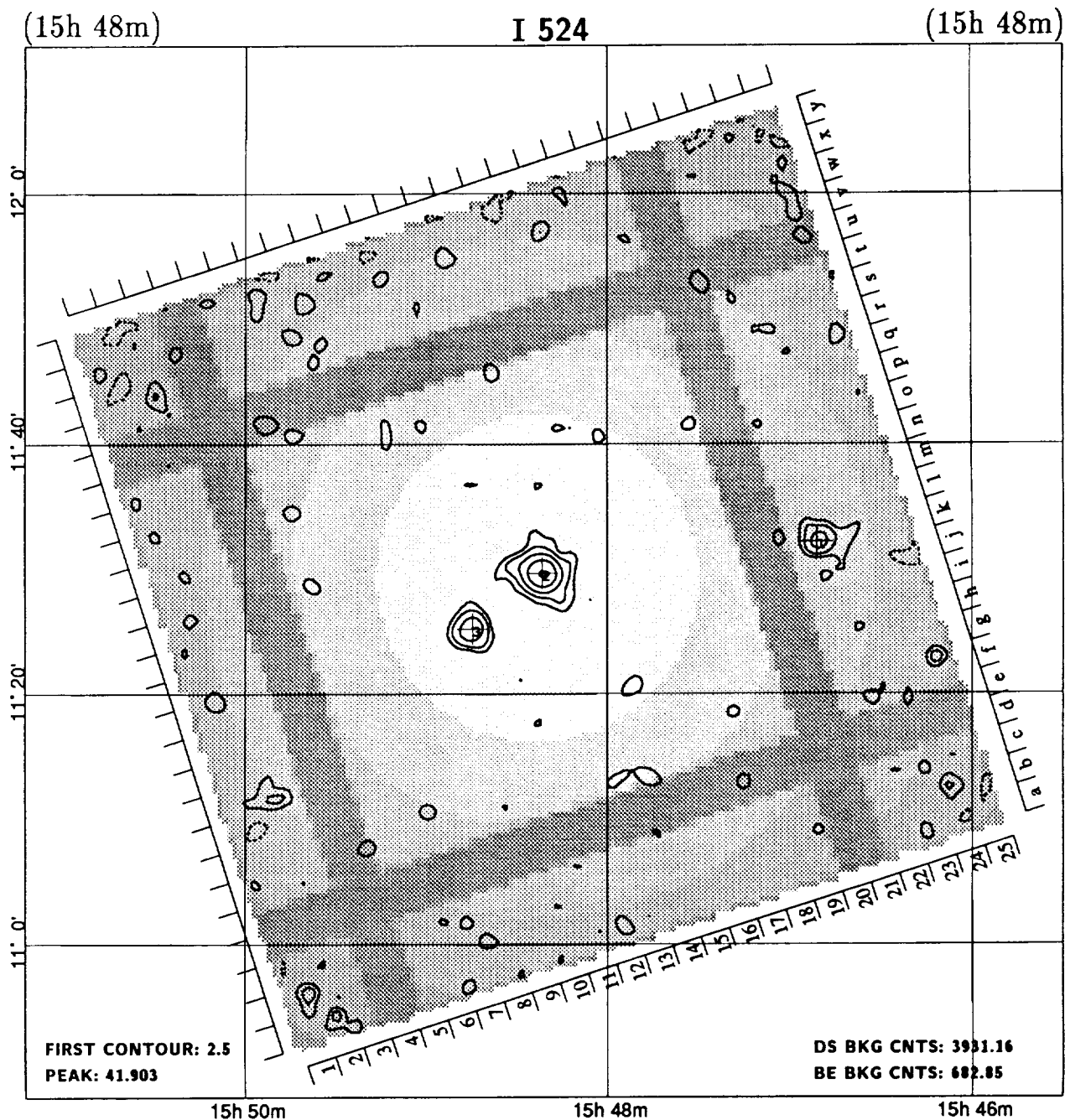


**FIELD CENTER:** 15<sup>h</sup>48<sup>m</sup>07.0<sup>s</sup> 05°36'10" (B1950)  
15<sup>h</sup>50<sup>m</sup>35.3<sup>s</sup> 05°27'10" (J2000)  
 $l$ : 14.22  $b$ : 42.23

**DATE:** 1980/239 - 1980/239  
**LIVETIME:** 1572.9s  
**ROLL ANGLE:** 80.4°

**NH:** 4.2E+20  
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3509	1	15 48 39.7	05 46 45	38	0.095	0.010	93.2	5.8	9.4	1.3	0	13.5	H



**4C 11.5A/B (QSO 1548+114) QUASAR SURVEY**

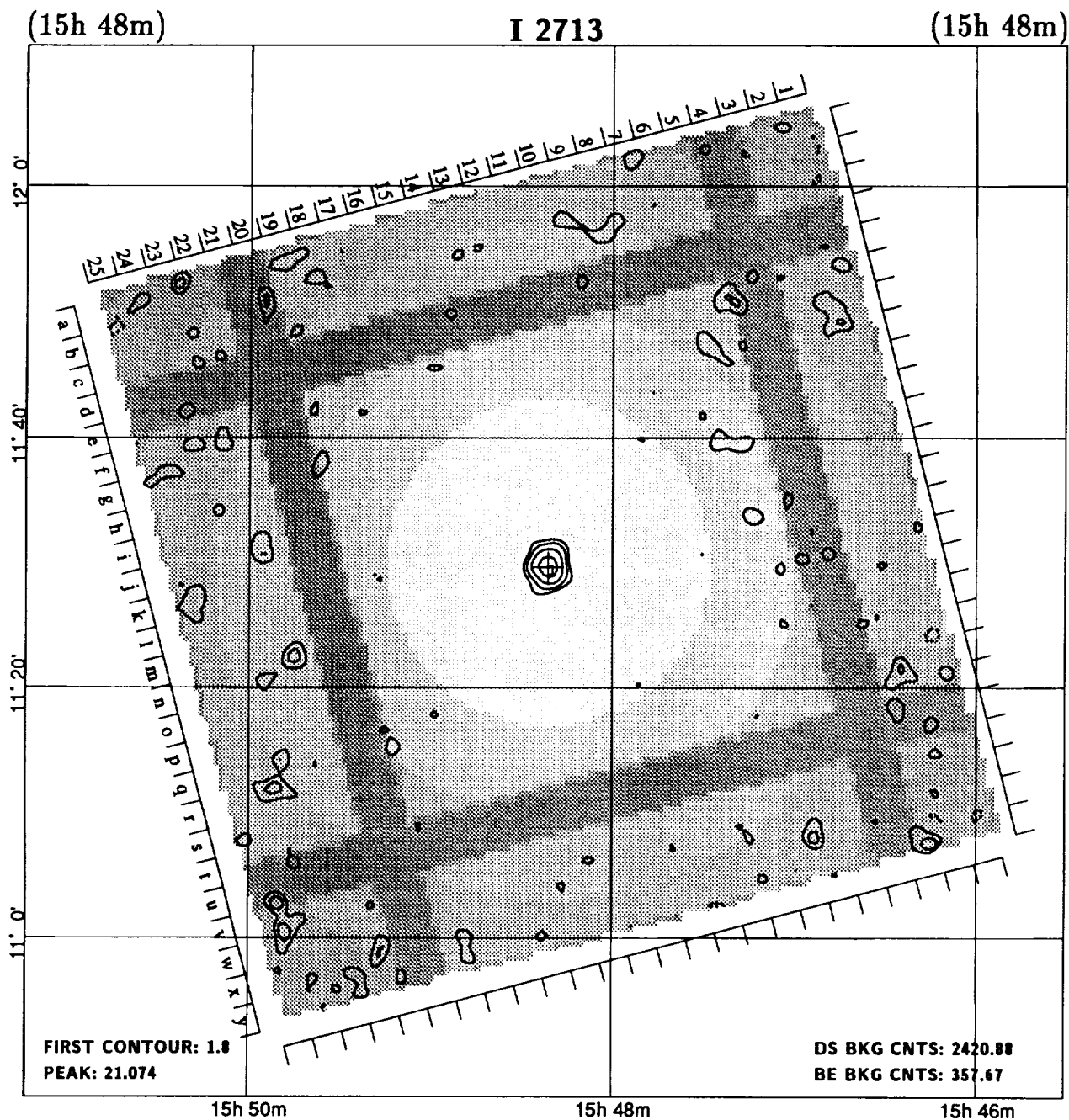
**FIELD CENTER:** 15<sup>h</sup>48<sup>m</sup>21.4<sup>s</sup> 11°29'47" (B1950)  
15<sup>h</sup>50<sup>m</sup>43.8<sup>s</sup> 11°20'47" (J2000)  
 $\ell$ : 21.32  $b$ : 45.12

**DATE:** 1979/ 35 - 1979/ 35  
**LIVETIME:** 3185.6s  
**ROLL ANGLE:** -107.8°

**NH:** 3.6E+20  
**REF/ID:**  
**FIELD FLAGS:**

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3503	1	15 46 50.7	11 32 13	51	0.0232	0.0044	34.4	8.6	5.3	1.1	0	22.4		
3508	2	15 48 21.7	11 29 41	31	0.0726	0.0057	172.5	11.5	12.7	1.4	0	0.2	AH	Q
3510	3	15 48 44.7	11 25 15	41	0.0284	0.0039	63.2	11.8	7.3	1.1	0	7.2	H	*





QUASAR SURVEY: 4C11.50

FIELD CENTER:  $15^{\text{h}}48^{\text{m}}22.0^{\text{s}}$   $11^{\circ}29'17''$  (B1950)  
 $15^{\text{h}}50^{\text{m}}44.4^{\text{s}}$   $11^{\circ}20'17''$  (J2000)  
 $l: 21.31$   $b: 45.12$

DATE: 1979/226 - 1979/226  
 LIVETIME: 1961.7s  
 ROLL ANGLE:  $75.3^{\circ}$

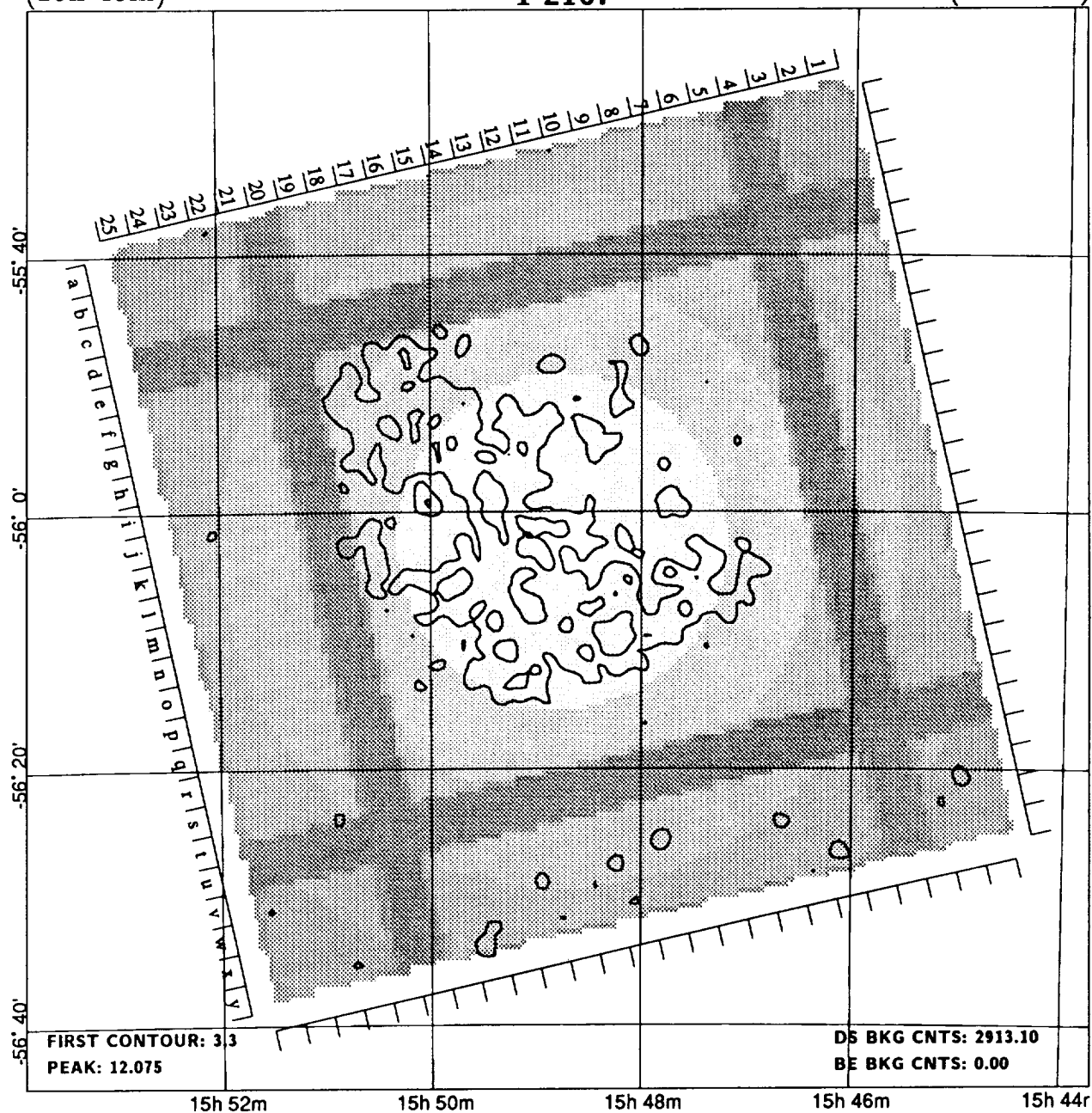
NH:  $3.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3508	1	15 48 21.4	11 29 40	32	0.0561	0.0064	82.1	6.9	8.7	1.1	0	0.4	AH	Q

(15h 48m)

I 2167

(15h 48m)



## X-RAY STUDY OF SUPERNOVA REMNANTS: G326.3-1.8=MSH15-56=MHR44

FIELD CENTER:  $15^{\text{h}}48^{\text{m}}48.0^{\text{s}}$   $-56^{\circ}02'59''$  (B1950)  
 $15^{\text{h}}52^{\text{m}}45.9^{\text{s}}$   $-56^{\circ}11'55''$  (J2000)  
 $l: 326.25$   $b: -1.77$

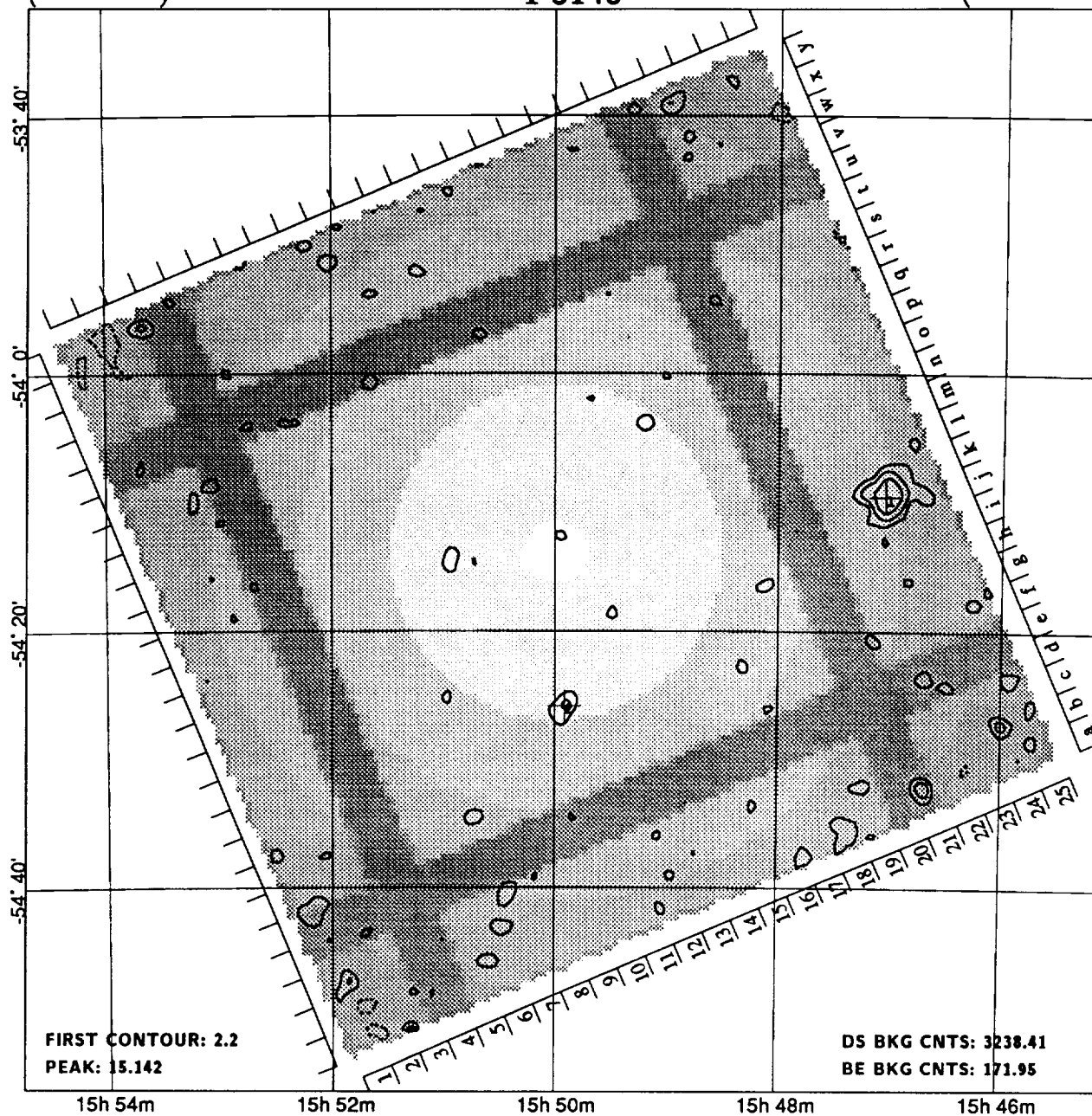
DATE: 1979/239 - 1979/239  
 LIVETIME: 2360.6s  
 ROLL ANGLE:  $77.3^{\circ}$

NH:  $1.5\text{E}+21$   
 REF/ID:  
 FIELD FLAGS: L

(15h 49m)

I 5148

(15h 49m)



## RADIO SOURCES NEAR COS-B GAMMA SOURCES #3

FIELD CENTER:  $15^h 49^m 55.2^s$   $-54^\circ 13' 47''$  (B1950)  
 $15^h 53^m 47.8^s$   $-54^\circ 22' 39''$  (J2000)  
 $l: 327.52$   $b: -0.45$

DATE: 1980/ 72 - 1980/ 72  
 LIVETIME: 2718.4s  
 ROLL ANGLE:  $-112.9^\circ$

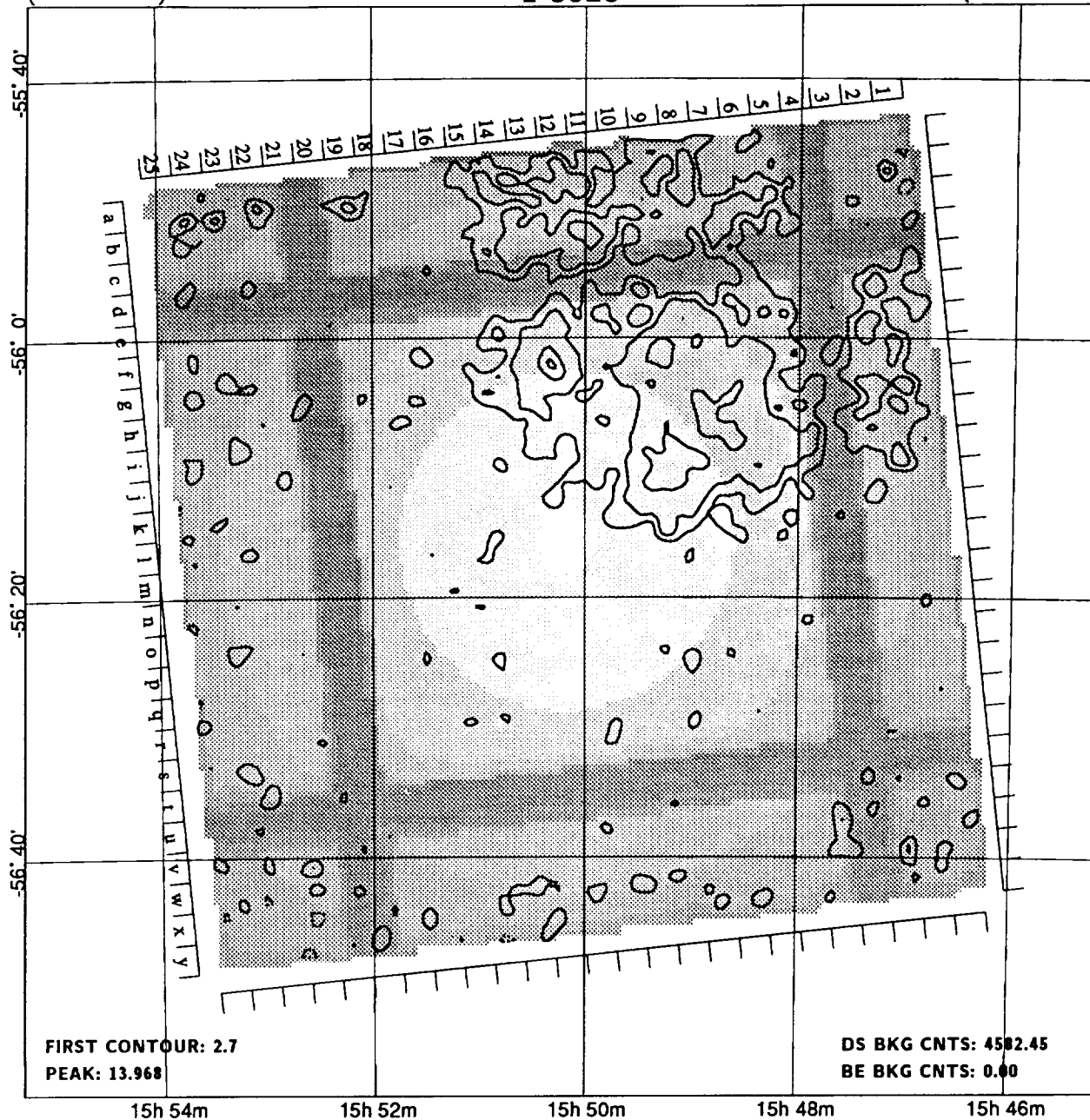
NH:  $1.6E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3505	1	15 47 02.7	-54 09 32	51	0.0326 0.0058	36.5	5.5	5.6	1.4	0	25.6	A
3514	2	15 49 54.8	-54 25 53	47	0.0105 0.0029	18.2	7.8	3.6	0.7	0	12.1	

(15h 50m)

I 8028

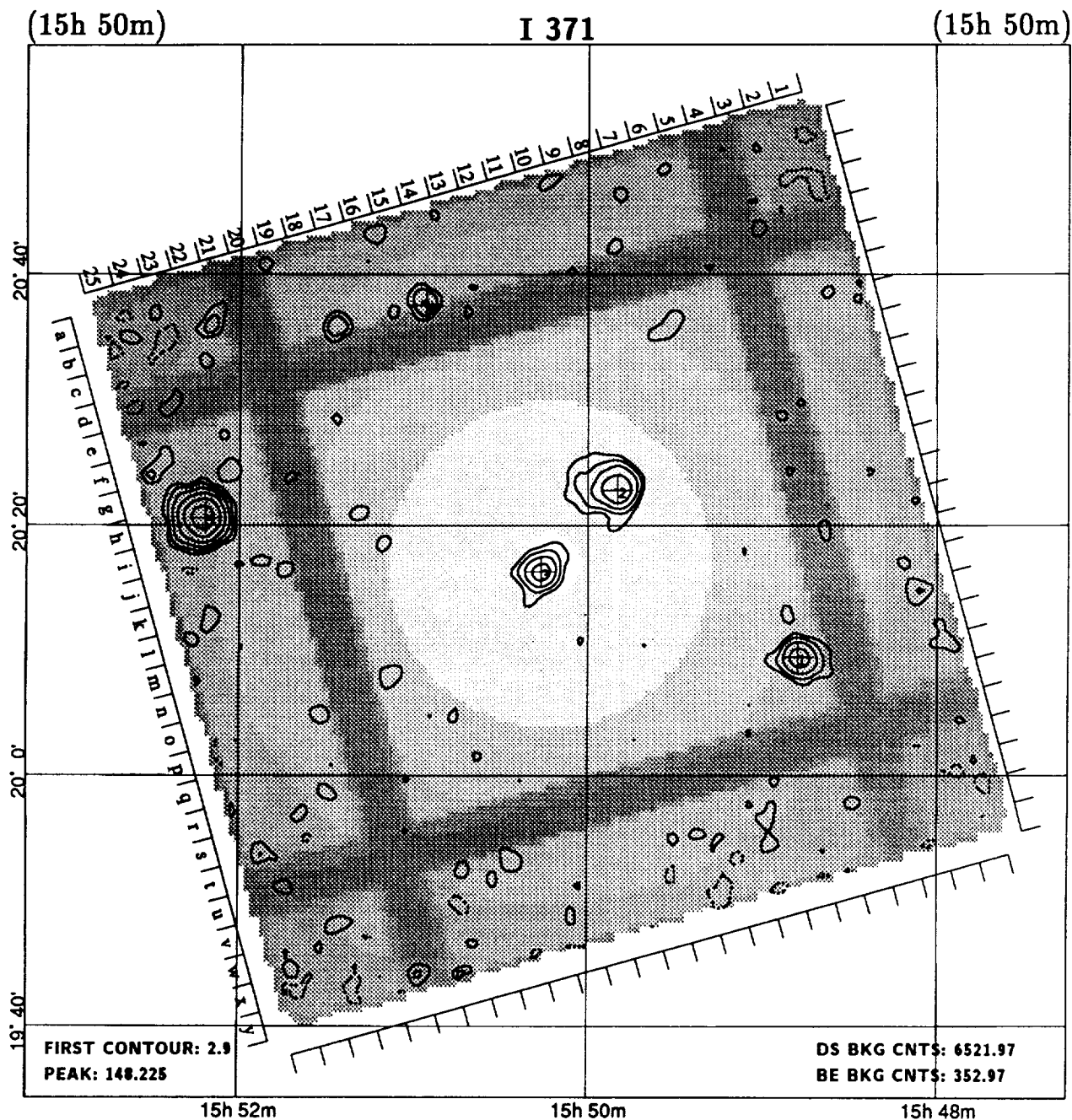
(15h 50m)



FIELD CENTER:  $15^h 50^m 13.0^s$   $-56^\circ 16' 29''$  (B1950)  
 $15^h 54^m 11.9^s$   $-56^\circ 25' 20''$  (J2000)  
 $l: 326.26$   $b: -2.07$

DATE: 1980/228 - 1980/228  
 LIVETIME: 3713.3s  
 ROLL ANGLE:  $84.1^\circ$

NH:  $1.5E+21$   
 REF/ID:  
 FIELD FLAGS: LS



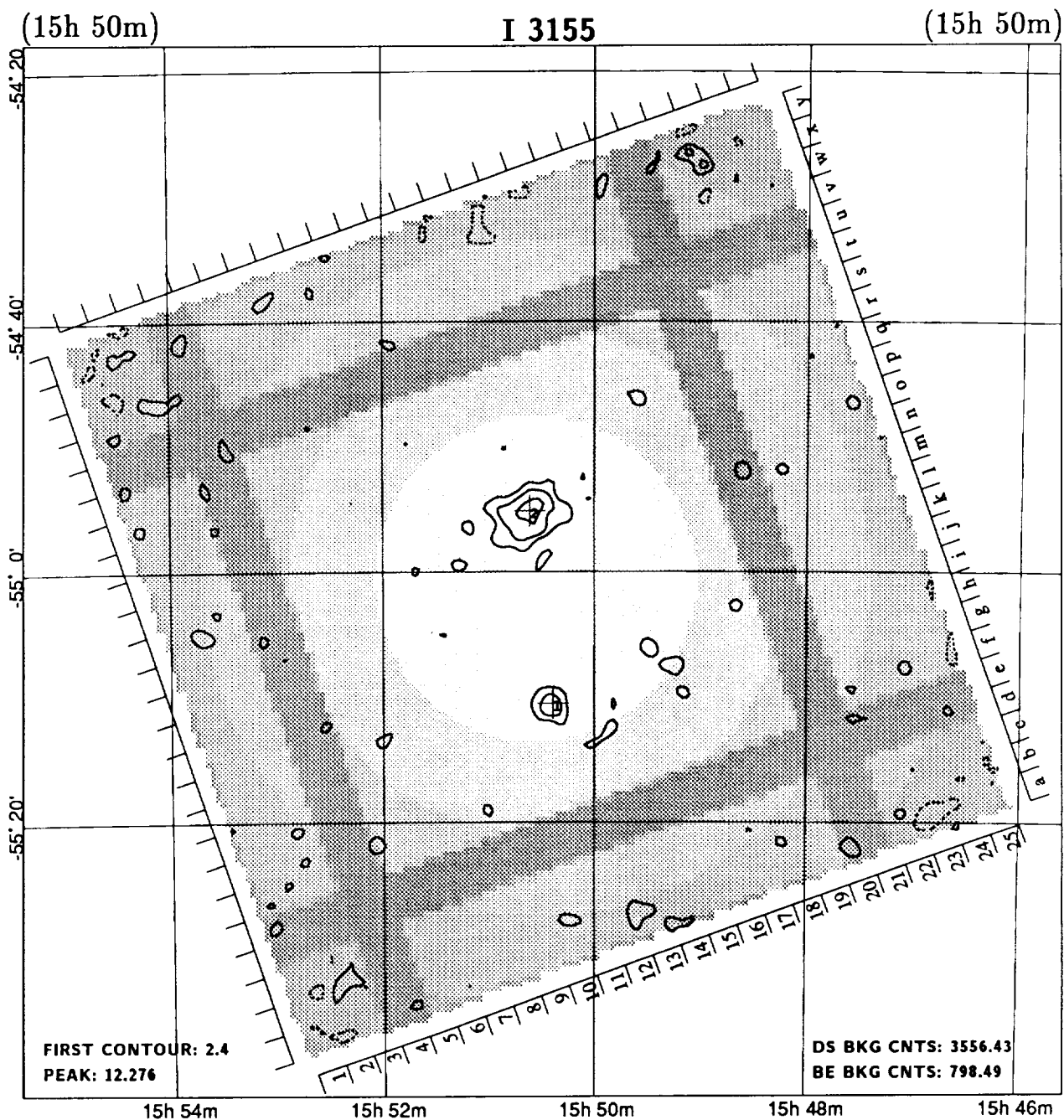
**3C 326, GIANT RADIO GALAXY**

FIELD CENTER:  $15^{\text{h}}50^{\text{m}}13.8^{\text{s}}$   $20^{\circ}16'17''$  (B1950)  
 $15^{\text{h}}52^{\text{m}}26.7^{\text{s}}$   $20^{\circ}07'24''$  (J2000)  
 $l: 33.34$   $b: 48.17$

DATE: 1979/226 - 1980/224  
 LIVETIME: 5284.9s  
 ROLL ANGLE:  $74.5^{\circ}$

NH:  $3.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3511	1	15 48 47.7	20 09 29	48	0.0355	0.0039	92.0	10.0	9.1	1.1	100	21.3	H	
3513	2	15 49 49.8	20 22 50	38	0.0483	0.0038	175.1	16.9	12.6	1.5	0	8.5	H	*
3515	3	15 50 16.2	20 16 19	31	0.0320	0.0031	125.9	18.1	10.5	1.1	0	0.7	H	
3518	4	15 50 56.0	20 37 33	52	*0.0118	0.0025	28.6	9.4	4.6	0.8	804	23.6	H	
3523	5	15 52 11.7	20 20 34	47	0.1532	0.0089	307.5	9.5	17.3	1.3	0	28.2	H	



**SNR NEAR COS-B GAMMA RAY SOURCES**

FIELD CENTER:  $15^h 50^m 30.0^s$   $-54^\circ 59' 59''$  (B1950)  
 $15^h 54^m 25.0^s$   $-55^\circ 08' 49''$  (J2000)  
 $l$ : 327.10  $b$ : -1.10

DATE: 1979/ 66 - 1979/ 66  
 LIVETIME: 2881.9s  
 ROLL ANGLE:  $-109.3^\circ$

NH:  $1.6E+21$   
 REF/ID: SNR  
 FIELD FLAGS:

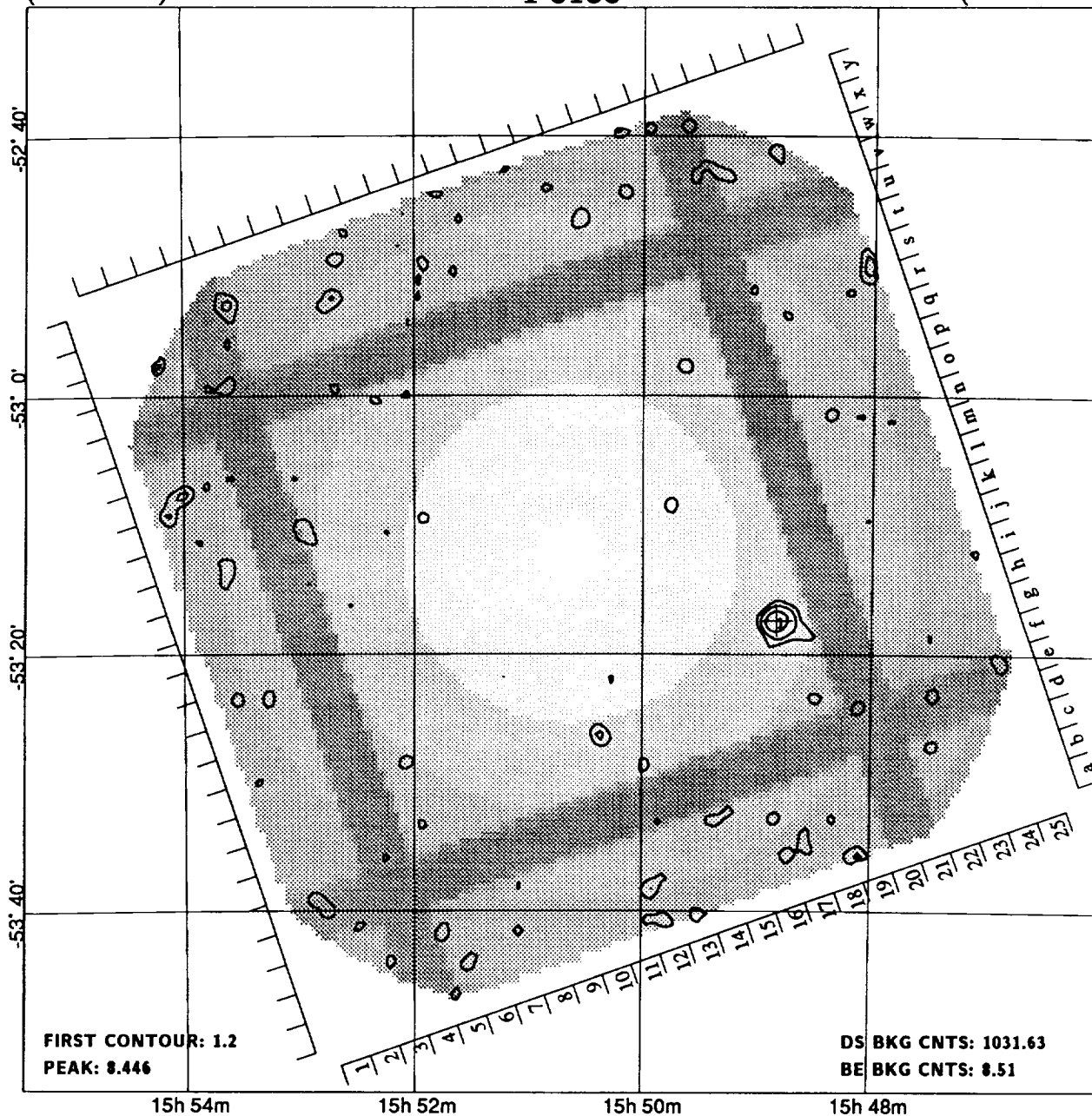
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3516	1	15 50 23.6	-55 10 30	44	0.0145	0.0032	27.9	9.1	4.6	0.9	0	10.6	
3517	2	15 50 36.5	-54 55 08	41	0.0271	0.0040	55.5	11.5	6.8	1.9	0	5.1	H



(15h 50m)

I 3158

(15h 50m)



## SNR NEAR COS-B GAMMA RAY SOURCES

FIELD CENTER:  $15^h 50^m 42.0^s$   $-53^\circ 11' 59''$  (B1950)  
 $15^h 54^m 31.8^s$   $-53^\circ 20' 48''$  (J2000)  
 $l: 328.26$   $b: 0.27$

DATE: 1979/ 57 - 1979/ 57  
 LIVETIME: 836.0s  
 ROLL ANGLE:  $-109.1^\circ$

NH:  $1.5E+21$   
 REF/ID:  
 FIELD FLAGS:

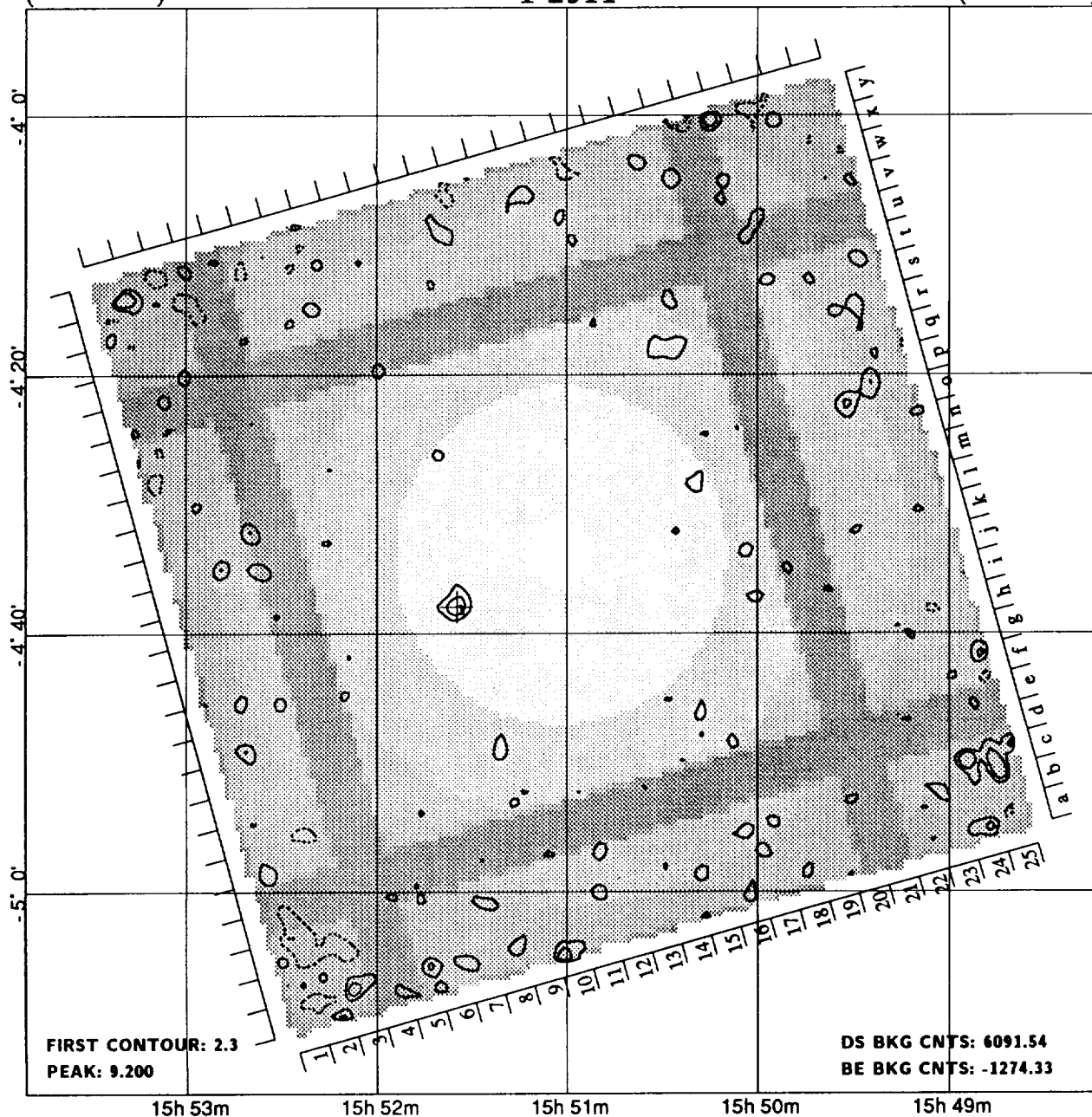
CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3512	1	15 48 49.8	-53 17 17	51	0.047	0.010	22.2	1.8	4.5	1.1	0	17.2	AH	*



(15h 51m)

I 2911

(15h 51m)



## DUST GLOBULES AND MOLECULAR CLOUDS: L134

FIELD CENTER:  $15^{\text{h}}51^{\text{m}}02.0^{\text{s}}$   $-04^{\circ}33'35''$  (B1950)  
 $15^{\text{h}}53^{\text{m}}40.3^{\text{s}}$   $-04^{\circ}42'25''$  (J2000)  
 $l$ : 4.13  $b$ : 35.71

DATE: 1979/ 36 - 1979/ 36  
 LIVETIME: 4936.2s  
 ROLL ANGLE:  $-105.5^{\circ}$

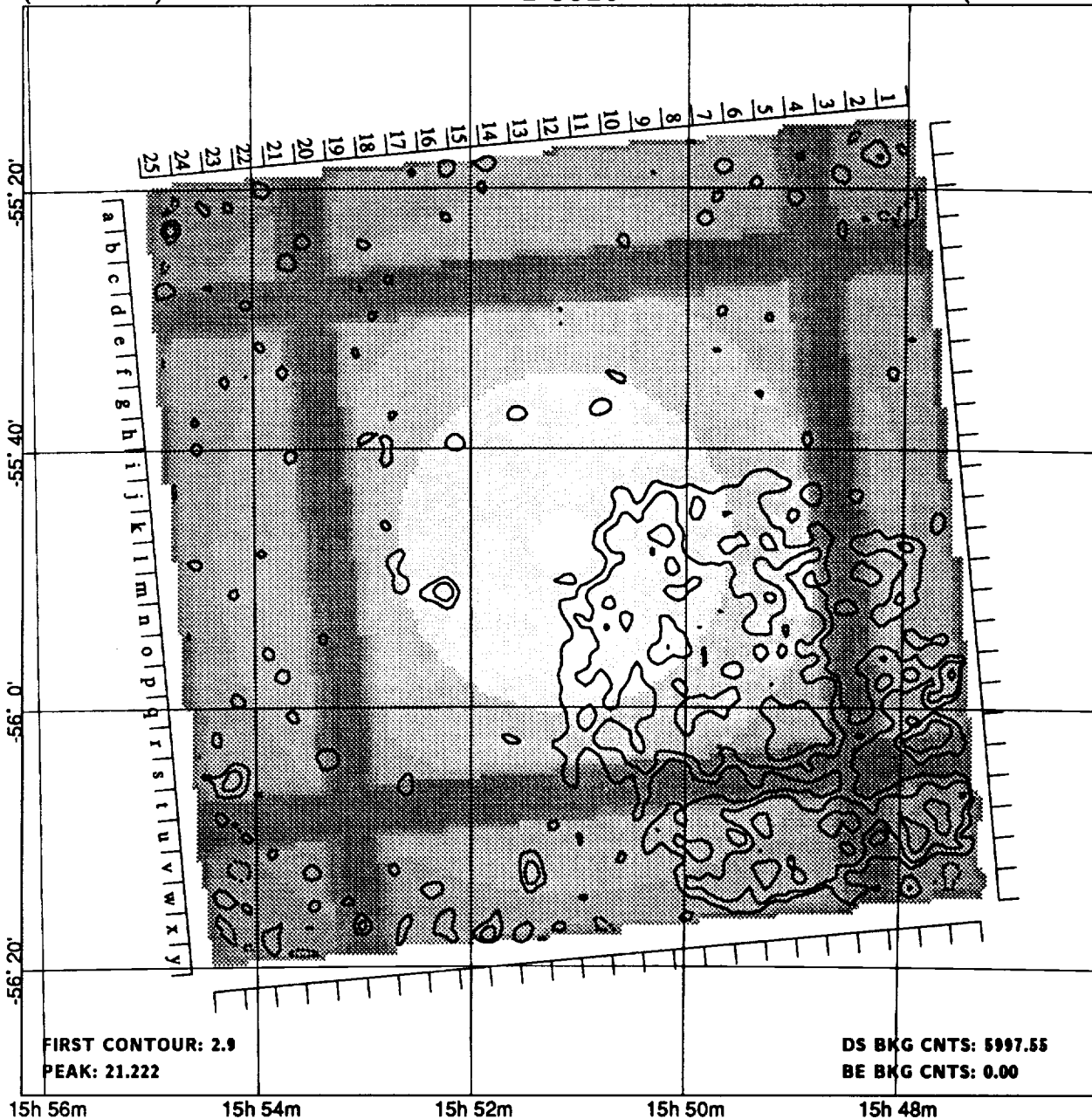
NH:  $9.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3520	1	15 51 34.8	-04 37 55	43	0.0068	0.0017	22.5	11.5	3.9	0.7	0	9.5		

(15h 51m)

I 8026

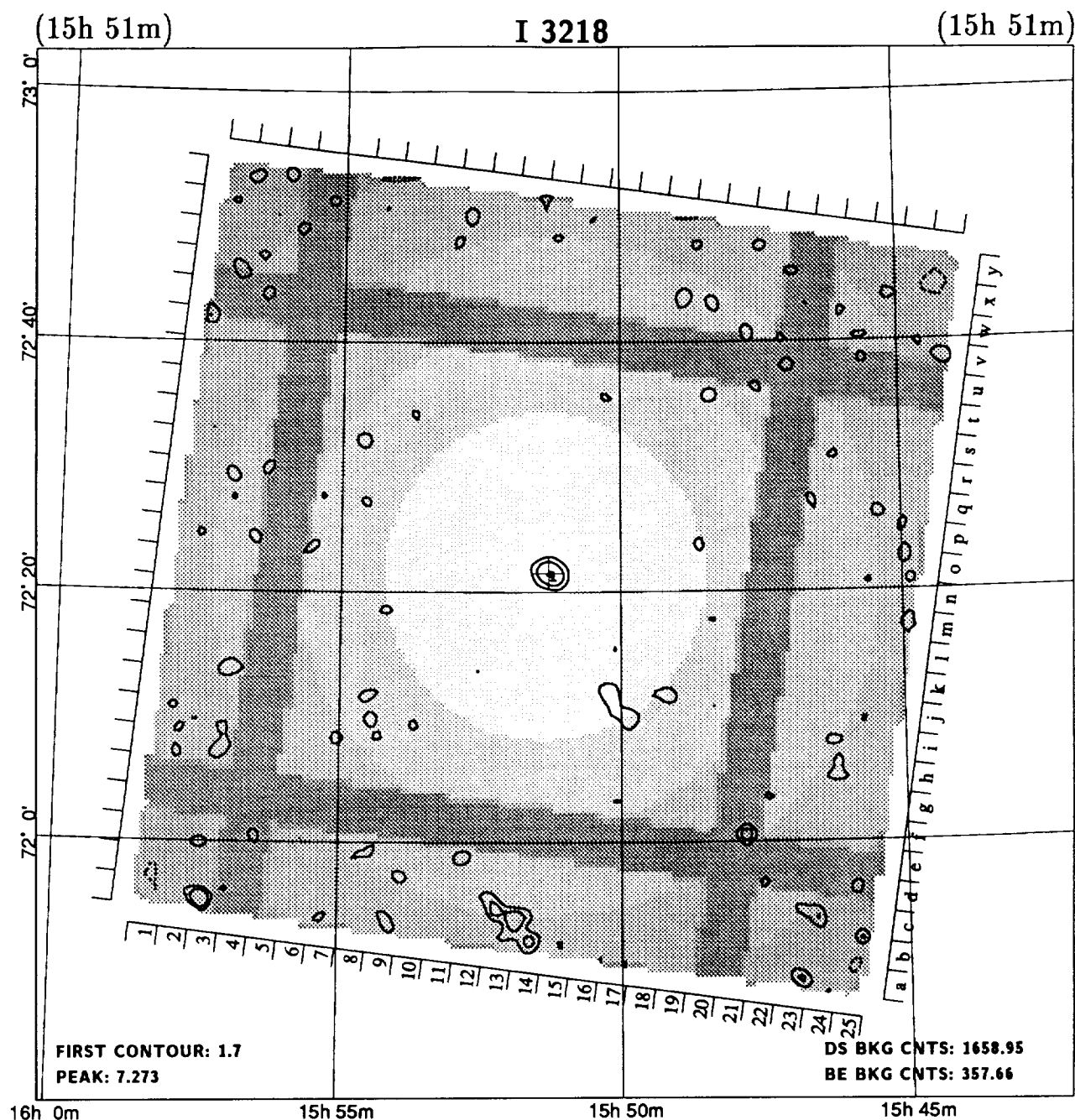
(15h 51m)



FIELD CENTER:  $15^{\text{h}}51^{\text{m}}09.0^{\text{s}}$   $-55^{\circ}47'59''$  (B1950)  
 $15^{\text{h}}55^{\text{m}}06.6^{\text{s}}$   $-55^{\circ}56'46''$  (J2000)  
 $l: 326.66$   $b: -1.78$

DATE: 1980/227 - 1980/227  
 LIVETIME: 4860.0s  
 ROLL ANGLE:  $84.7^{\circ}$

NH:  $1.5\text{E}+21$   
 REF/ID:  
 FIELD FLAGS: LS



RS CVN SYSTEMS: RS UMI

FIELD CENTER: 15<sup>h</sup>51<sup>m</sup>12.0<sup>s</sup> 72°21'35" (B1950)  
15<sup>h</sup>50<sup>m</sup>48.8<sup>s</sup> 72°12'41" (J2000)  
 $l$ : 106.88  $b$ : 38.83

DATE: 1979/ 57 - 1979/ 57  
LIVETIME: 1344.3s  
ROLL ANGLE: -82.5°

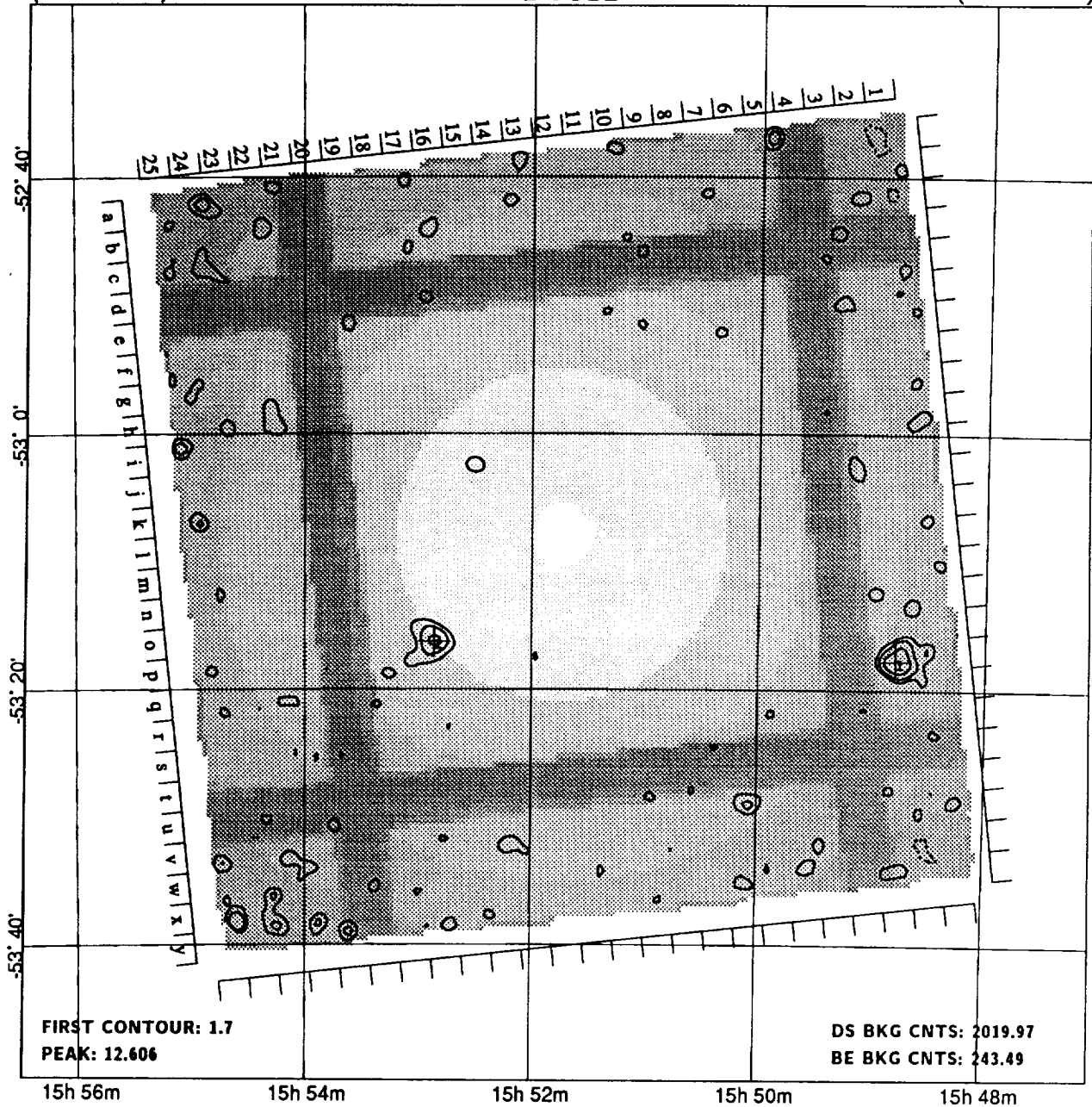
NH: 2.8E+20  
REF/ID: !  
FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3519	1	15 51 17.4	72 21 30	36	0.0247	0.0055	24.7	5.3	4.5	0.9	0	0.4	H	CV

(15h 51m)

I 7812

(15h 51m)



G328.4+0.2, CRAB-LIKE SNR'S

FIELD CENTER: 15<sup>h</sup>51<sup>m</sup>46.0<sup>s</sup> -53°08'35" (B1950)  
 15<sup>h</sup>55<sup>m</sup>35.9<sup>s</sup> -53°17'20" (J2000)  
 $l$ : 328.42  $b$ : 0.22

DATE: 1980/227 - 1980/228  
 LIVETIME: 1636.8s  
 ROLL ANGLE: 83.8°

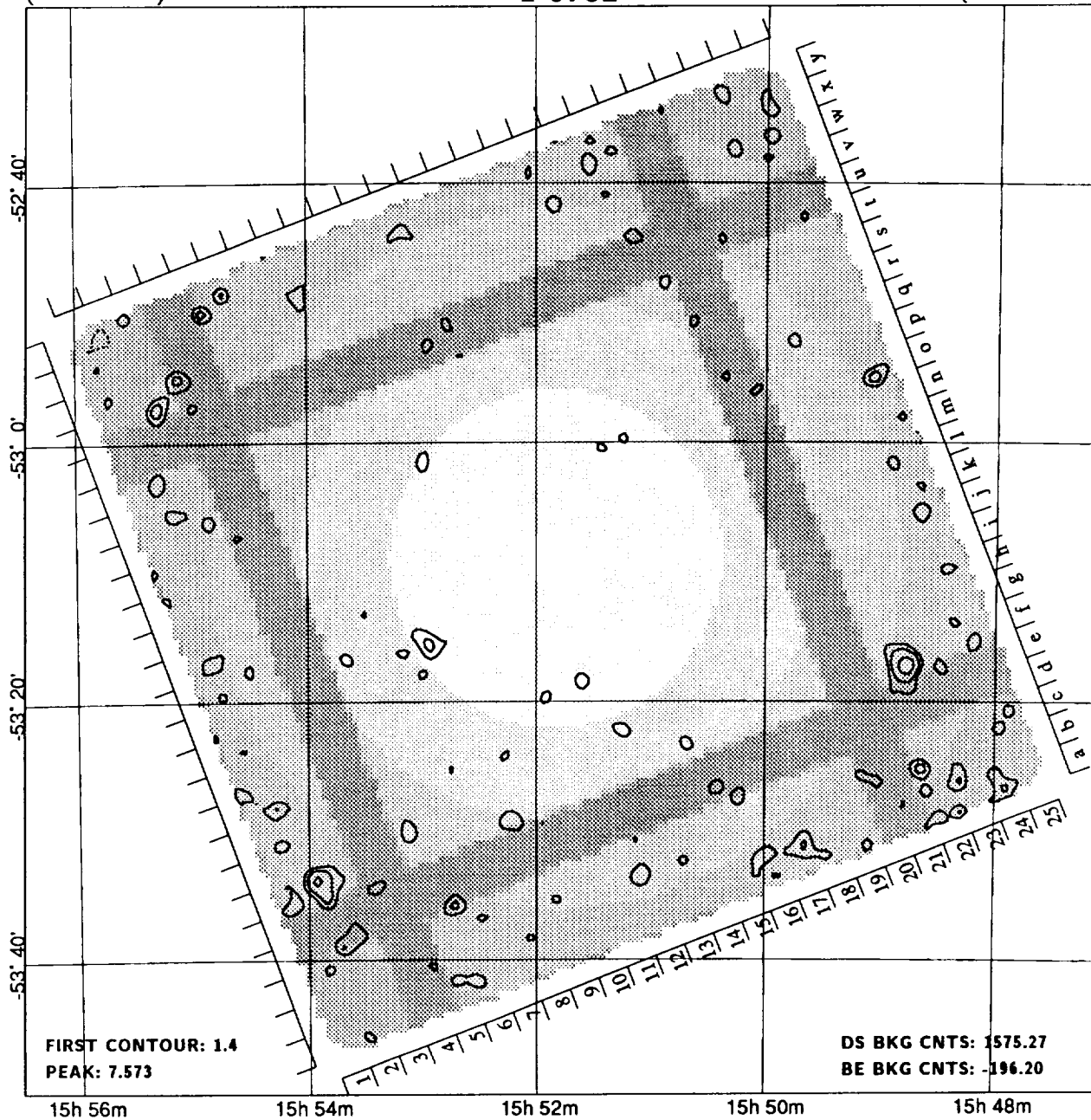
NH: 1.5E+21  
 REF/ID: SNR  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3512	1	15 48 47.3	-53 17 42	51	0.0411	0.0087	25.5	3.5	4.7	1.1	500	28.1	AH	*
3525	2	15 52 51.6	-53 16 14	42	0.0240	0.0053	24.4	4.6	4.5	1.0	0	12.3	H	*

(15h 51m)

I 6782

(15h 51m)



FIELD CENTER:  $15^{\text{h}}51^{\text{m}}47.0^{\text{s}}$   $-53^{\circ}08'23''$  (B1950)  
 $15^{\text{h}}55^{\text{m}}36.9^{\text{s}}$   $-53^{\circ}17'08''$  (J2000)  
 $l: 328.42$   $b: 0.22$

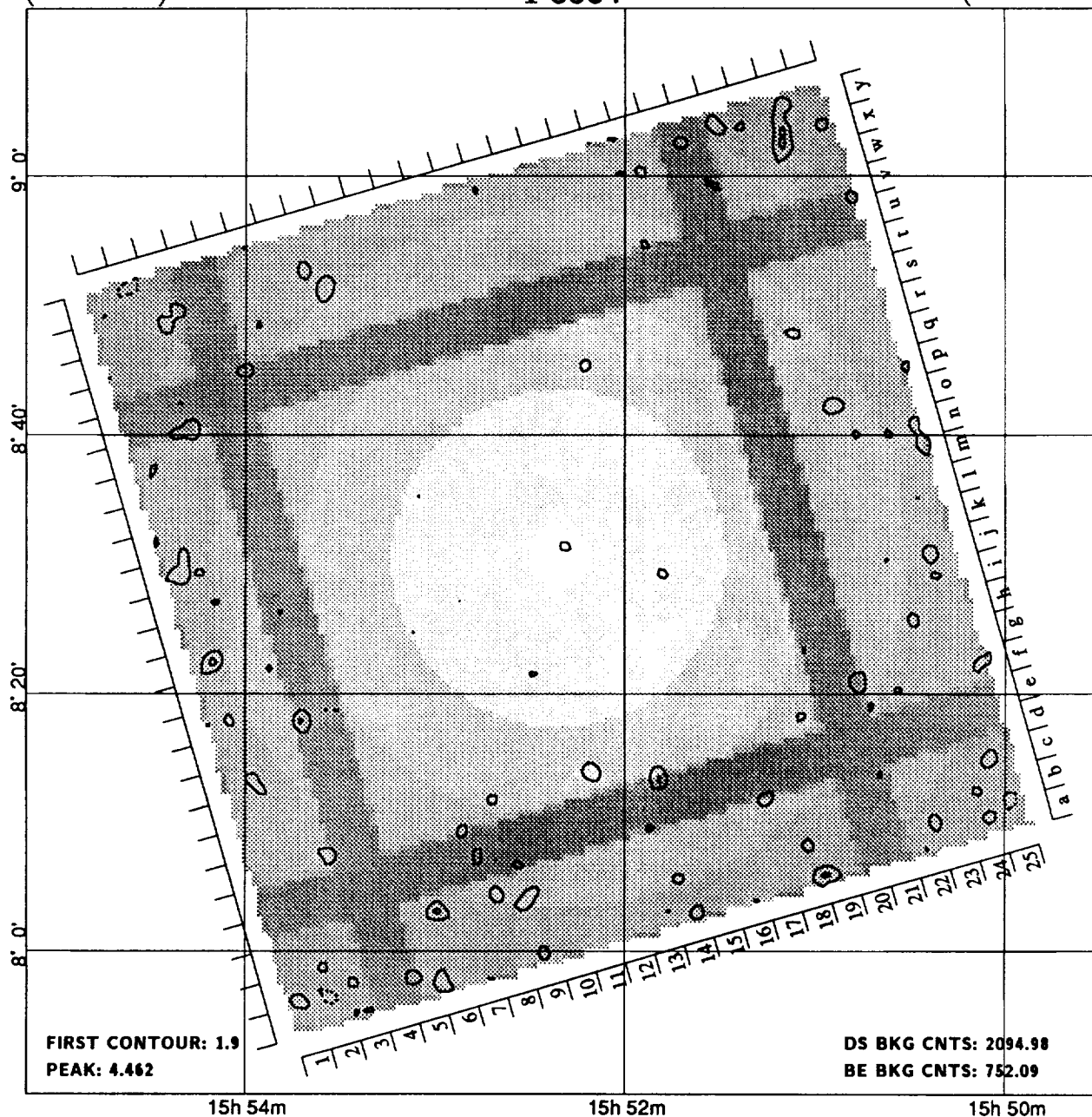
DATE: 1980/ 70 - 1980/ 70  
 LIVETIME: 1276.5s  
 ROLL ANGLE:  $-110.9^{\circ}$

NH:  $1.5\text{E}+21$   
 REF/ID: SNR  
 FIELD FLAGS:

(15h 52m)

I 5384

(15h 52m)



## SURVEY OF BRIGHT QUASARS (PG)

FIELD CENTER:  $15^{\text{h}}52^{\text{m}}19.1^{\text{s}}$   $08^{\circ}31'01''$  (B1950)  
 $15^{\text{h}}54^{\text{m}}44.4^{\text{s}}$   $08^{\circ}22'16''$  (J2000)  
 $\ell$ : 18.33  $b$ : 42.84

DATE: 1980/ 39 - 1980/ 39  
 LIVETIME: 1697.6s  
 ROLL ANGLE:  $-106.1^{\circ}$

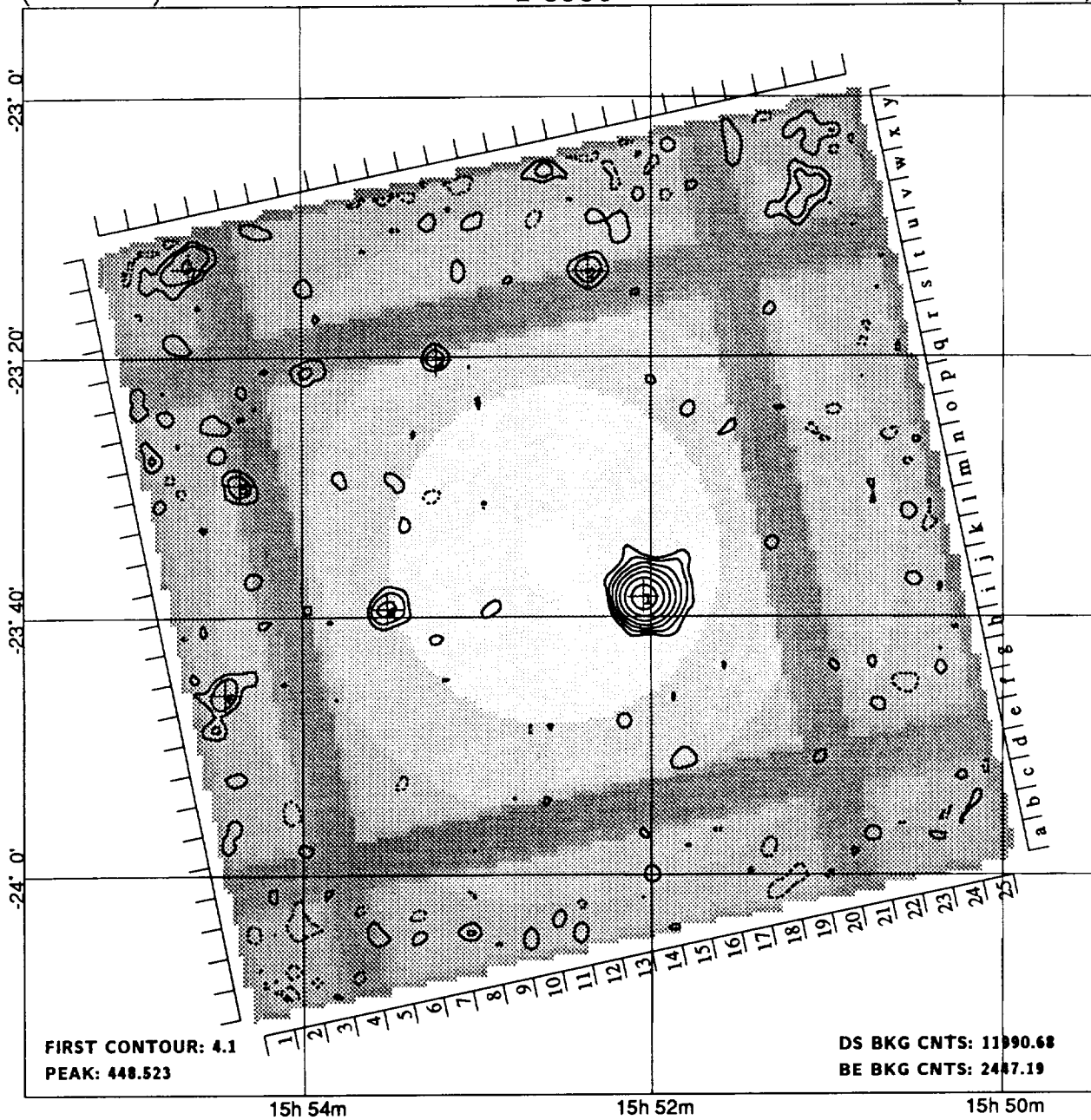
NH:  $3.4\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: L



(15h 52m)

I 5936

(15h 52m)



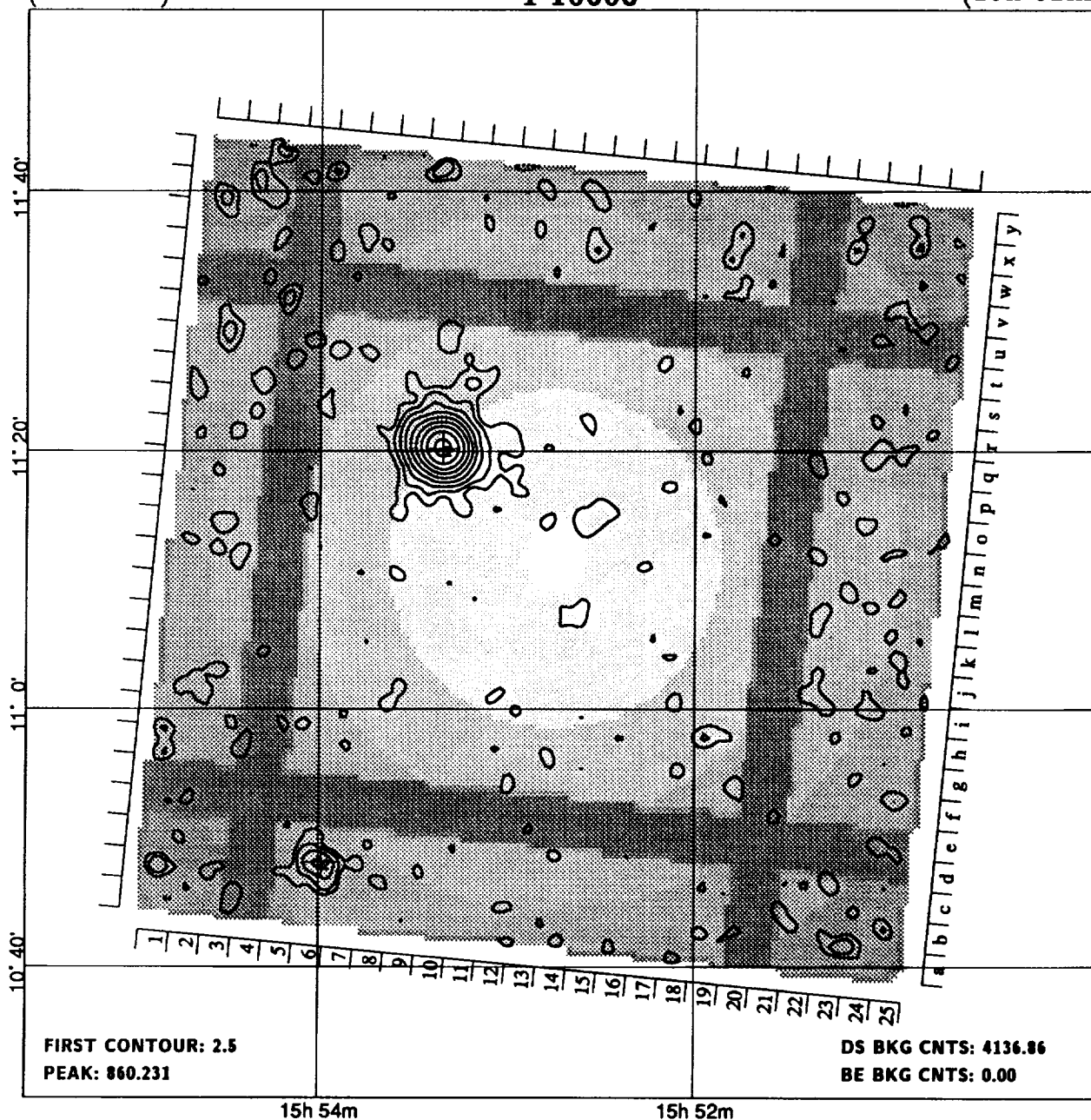
CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3521	1	15 52 02.6	-23 38 29	37	0.2545	0.0062	1707.9	36.1	40.9	1.2	0	7.3	H
3524	2	15 52 21.5	-23 13 24	54	*0.0084	0.0016	39.2	14.8	5.3	0.8	806	21.9	H
3528	3	15 53 13.7	-23 20 13	52	*0.0059	0.0014	31.2	26.8	4.1	0.6	804	17.6	
3530	4	15 53 30.8	-23 39 24	41	0.0120	0.0017	71.4	30.6	7.1	0.9	0	13.8	
3534	5	15 54 21.2	-23 29 50	55	*0.0070	0.0017	28.8	21.2	4.1	0.8	1006	25.7	
3535	6	15 54 26.5	-23 46 01	56	0.0087	0.0020	32.4	21.6	4.4	1.2	0	28.4	
3536	7	15 54 38.3	-23 13 11	62	*0.0099	0.0027	23.8	18.2	3.7	1.5	906	36.2	H



(15h 52m)

I 10608

(15h 52m)



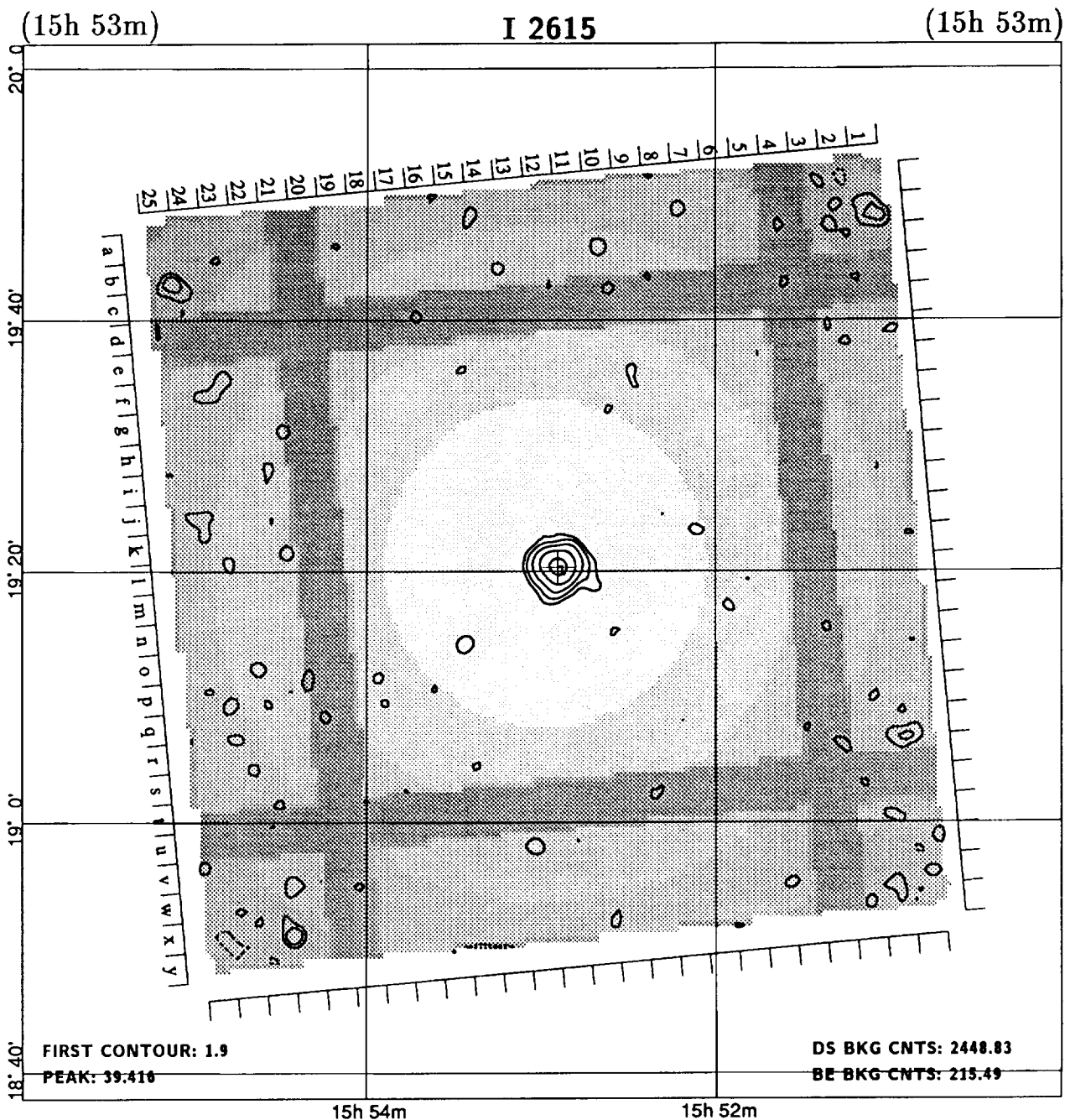
## ZWICKY CLUSTER 383

**FIELD CENTER:**  $15^h 52^m 42.0^s$   $11^\circ 11' 59''$  (B1950)  
 $15^h 55^m 04.5^s$   $11^\circ 03' 15''$  (J2000)  
 $l: 21.64$   $b: 44.04$

**DATE:** 1981/ 71 - 1981/ 71  
**LIVETIME:** 3352.2s  
**ROLL ANGLE:**  $-84.6^\circ$

**NH:**  $3.7E+20$   
**REF/ID:**  
**FIELD FLAGS:** L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3529	1L	15 53 20.8	11 20 12	37	1.274	0.029	2706.7	226.3	44.3	1.3	0	12.6	
3533	2L	15 53 59.0	10 48 09	51	0.0291	0.0066	34.6	10.4	4.3	1.3	0	30.3	



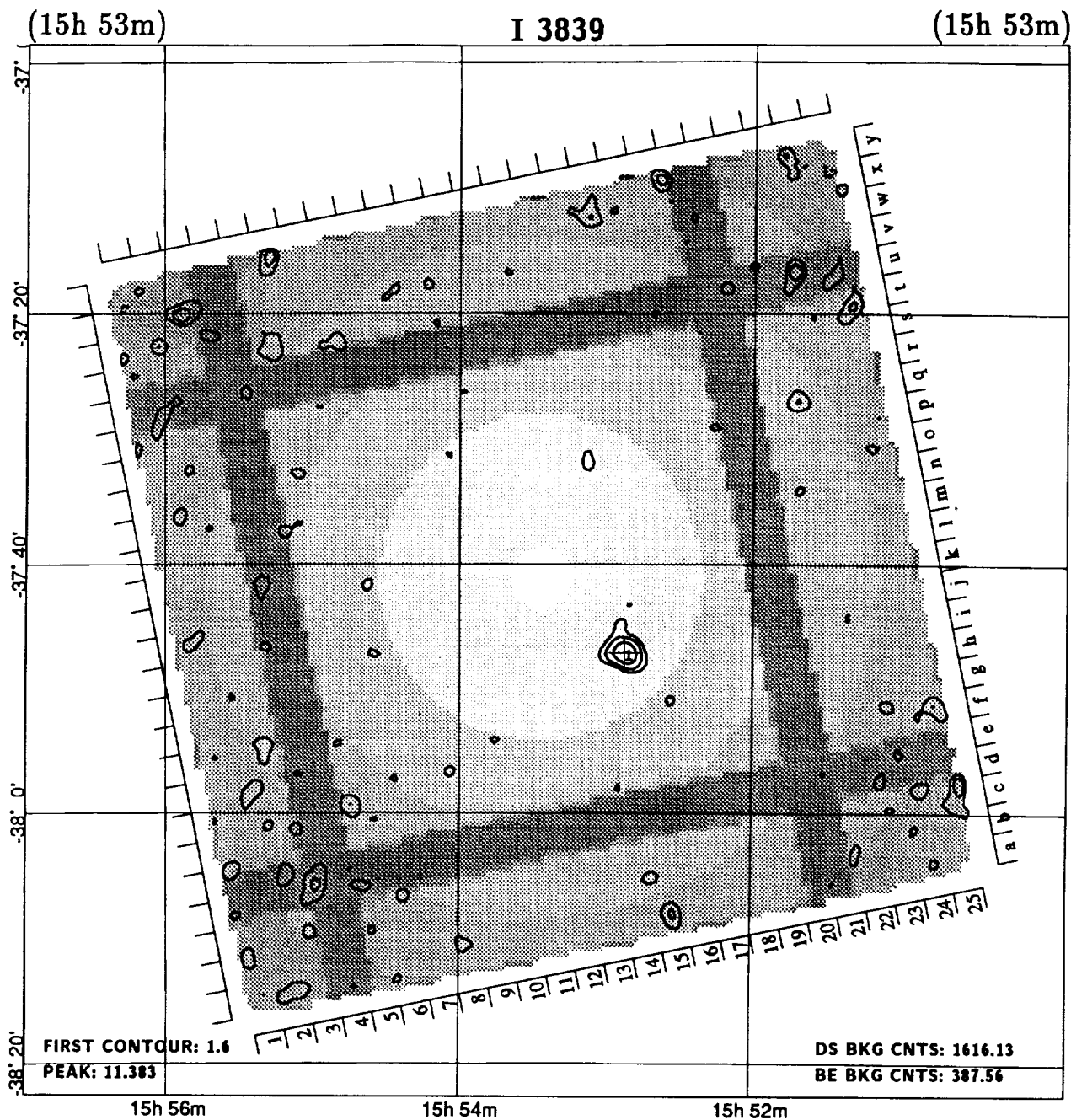
SEYFERT GALAXY SURVEY: MKN 291

FIELD CENTER:  $15^{\text{h}}53^{\text{m}}00.0^{\text{s}}$   $19^{\circ}19'59''$  (B1950)  
 $15^{\text{h}}55^{\text{m}}13.8^{\text{s}}$   $19^{\circ}11'16''$  (J2000)  
 $l: 32.35$   $b: 47.25$

DATE: 1979/226 - 1979/226  
 LIVETIME: 1984.4s  
 ROLL ANGLE:  $84.8^{\circ}$

NH:  $3.5\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3527	1	15 52 54.2	19 20 18	31	0.1164	0.0090	171.8	6.2	12.9	1.4	0	1.4	H	SY



**T TAURI STARS: RU LUP**

FIELD CENTER: 15<sup>h</sup>53<sup>m</sup>24.2<sup>s</sup> -37°40'40" (B1950)  
 15<sup>h</sup>56<sup>m</sup>42.2<sup>s</sup> -37°49'20" (J2000)  
 $l$ : 338.65  $b$ : 11.88

DATE: 1980/ 51 - 1980/ 51  
 LIVETIME: 1309.6s  
 ROLL ANGLE: -101.6°

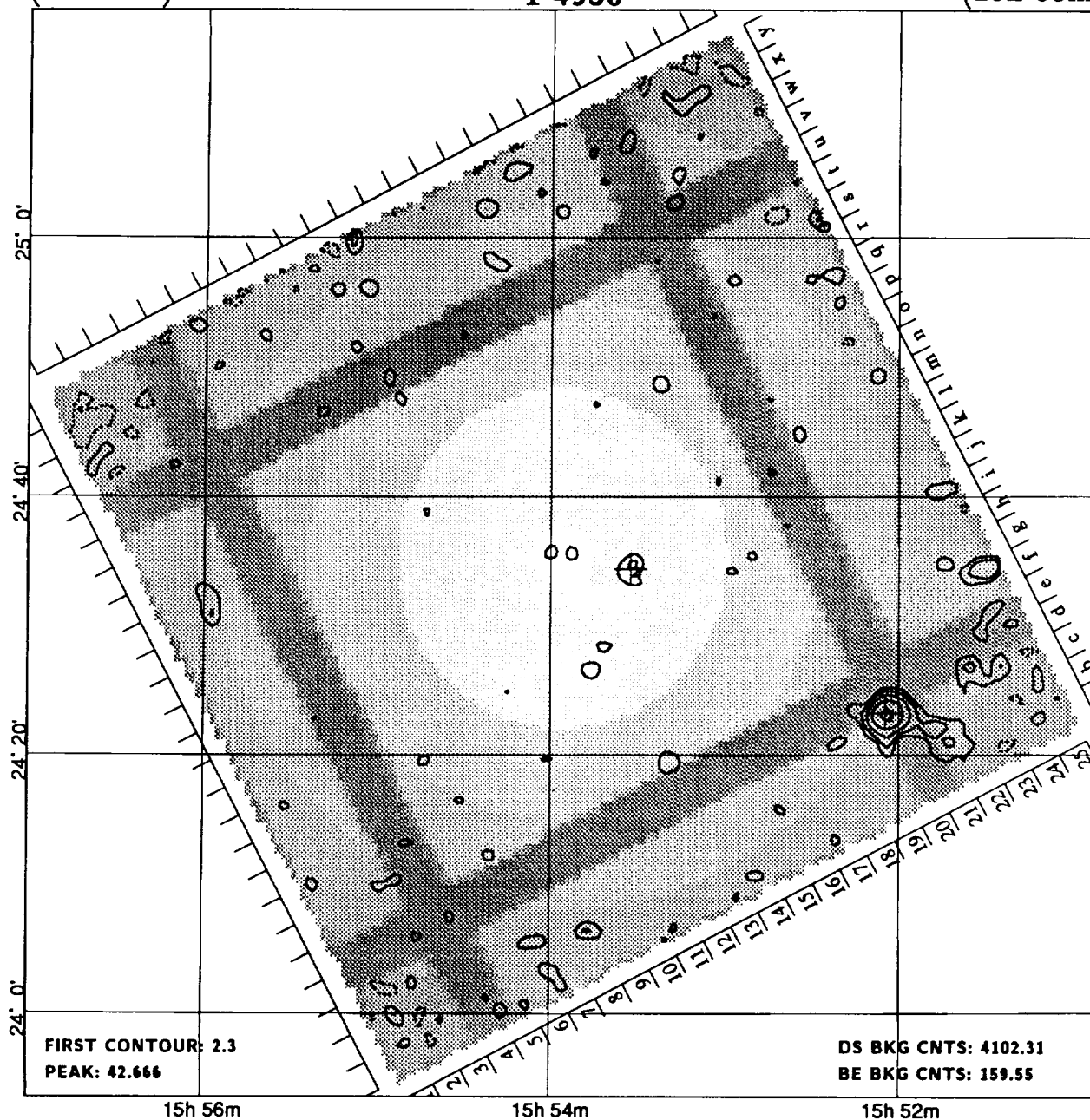
NH: 1.6E+21  
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3526	1	15 52 52.4	-37 47 08	41	0.0424	0.0074	37.6	5.4	5.7	1.0	0	8.9	H	S

(15h 53m)

I 4950

(15h 53m)



## K475, INTERACTING GALAXIES WITH COMPACT RADIO NUCLEI

FIELD CENTER:  $15^{\text{h}}53^{\text{m}}56.2^{\text{s}}$   $24^{\circ}35'32''$  (B1950)  
 $15^{\text{h}}56^{\text{m}}03.9^{\text{s}}$   $24^{\circ}26'53''$  (J2000)  
 $l: 39.95$   $b: 48.58$

DATE: 1980/ 24 - 1980/ 24  
 LIVETIME: 3324.2s  
 ROLL ANGLE:  $-117.6^{\circ}$

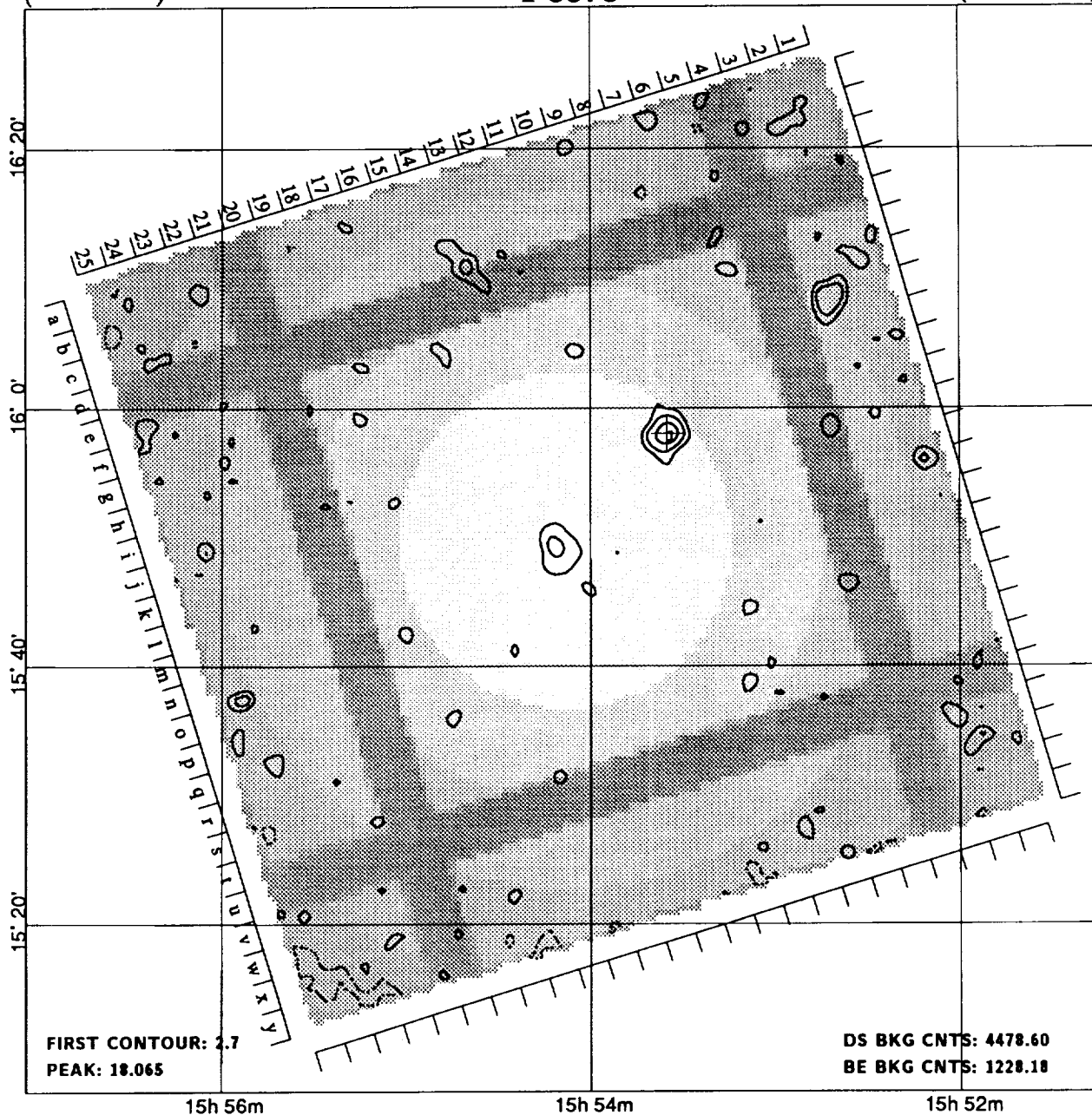
NH:  $4.6\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3522	1	15 52 04.5	24 23 15	48	*0.0700	0.0076	89.0	4.0	9.2	1.4	1409	28.2		AGN
3531	2	15 53 32.3	24 34 23	47	0.0088	0.0024	20.7	10.3	3.7	0.6	0	5.5		

(15h 54m)

I 5578

(15h 54m)



FIELD CENTER:  $15^{\text{h}}54^{\text{m}}09.0^{\text{s}}$   $15^{\circ}48'59''$  (B1950)  
 $15^{\text{h}}56^{\text{m}}26.6^{\text{s}}$   $15^{\circ}40'21''$  (J2000)  
 $l: 27.74$   $b: 45.70$

DATE: 1980/223 - 1980/224  
 LIVETIME: 3629.1s  
 ROLL ANGLE:  $73.0^{\circ}$

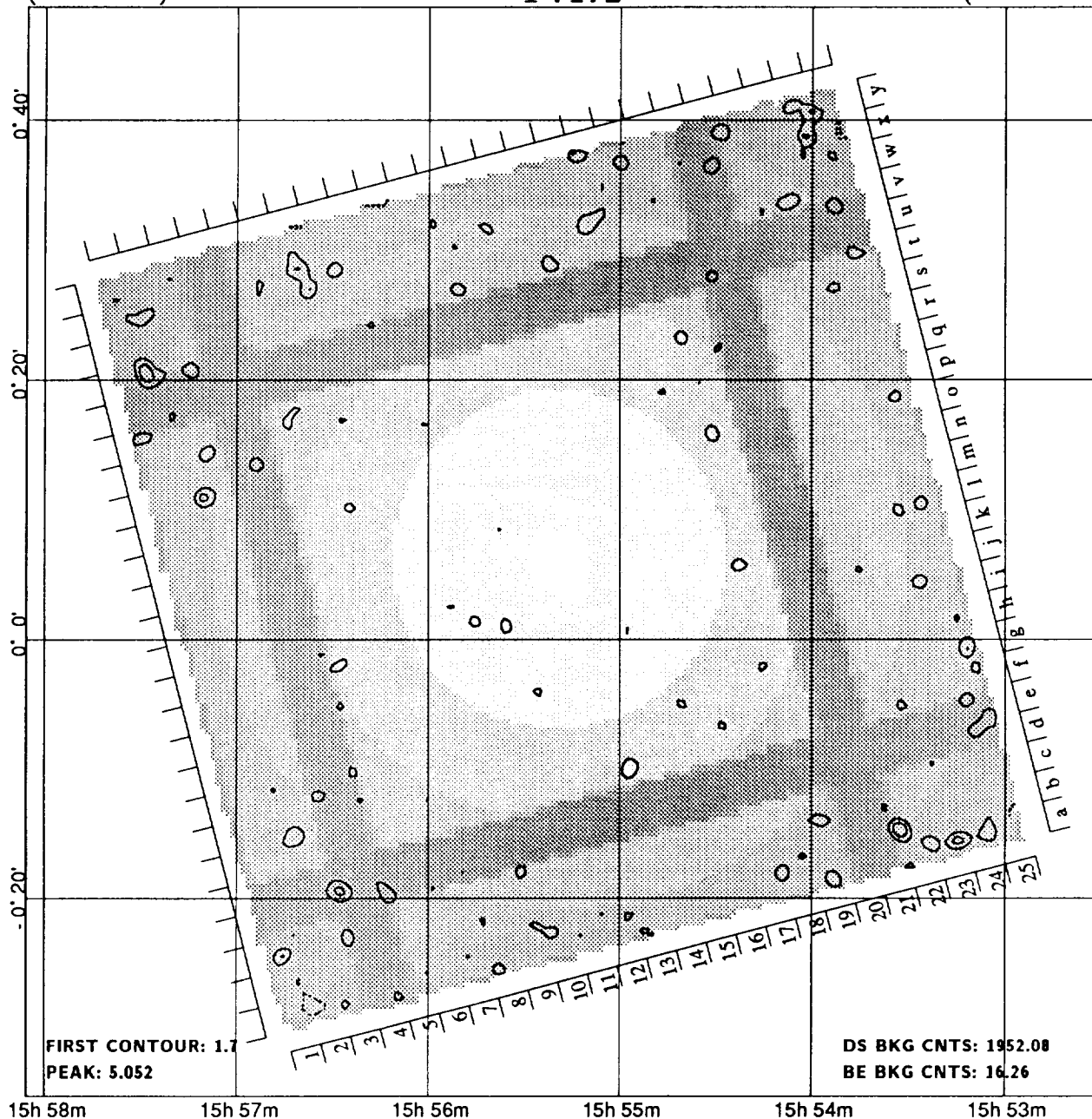
NH:  $3.2\text{E}+20$   
 REF/ID: !  
 FIELD FLAGS: L

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3532	1L	15 53 35.1	15 58 03	41	0.0206	0.0042	48.4	20.6	4.8	1.0	0	12.1		AGN

(15h 55m)

I 7172

(15h 55m)



## DA 393, BURSTING RADIO SOURCE

FIELD CENTER:  $15^h 55^m 17.7^s$   $00^\circ 06' 42''$  (B1950)  
 $15^h 57^m 51.4^s$   $-00^\circ 01' 51''$  (J2000)  
 $l: 9.58$   $b: 37.68$

DATE: 1980/ 41 - 1980/ 41  
 LIVETIME: 1581.8s  
 ROLL ANGLE:  $-104.5^\circ$

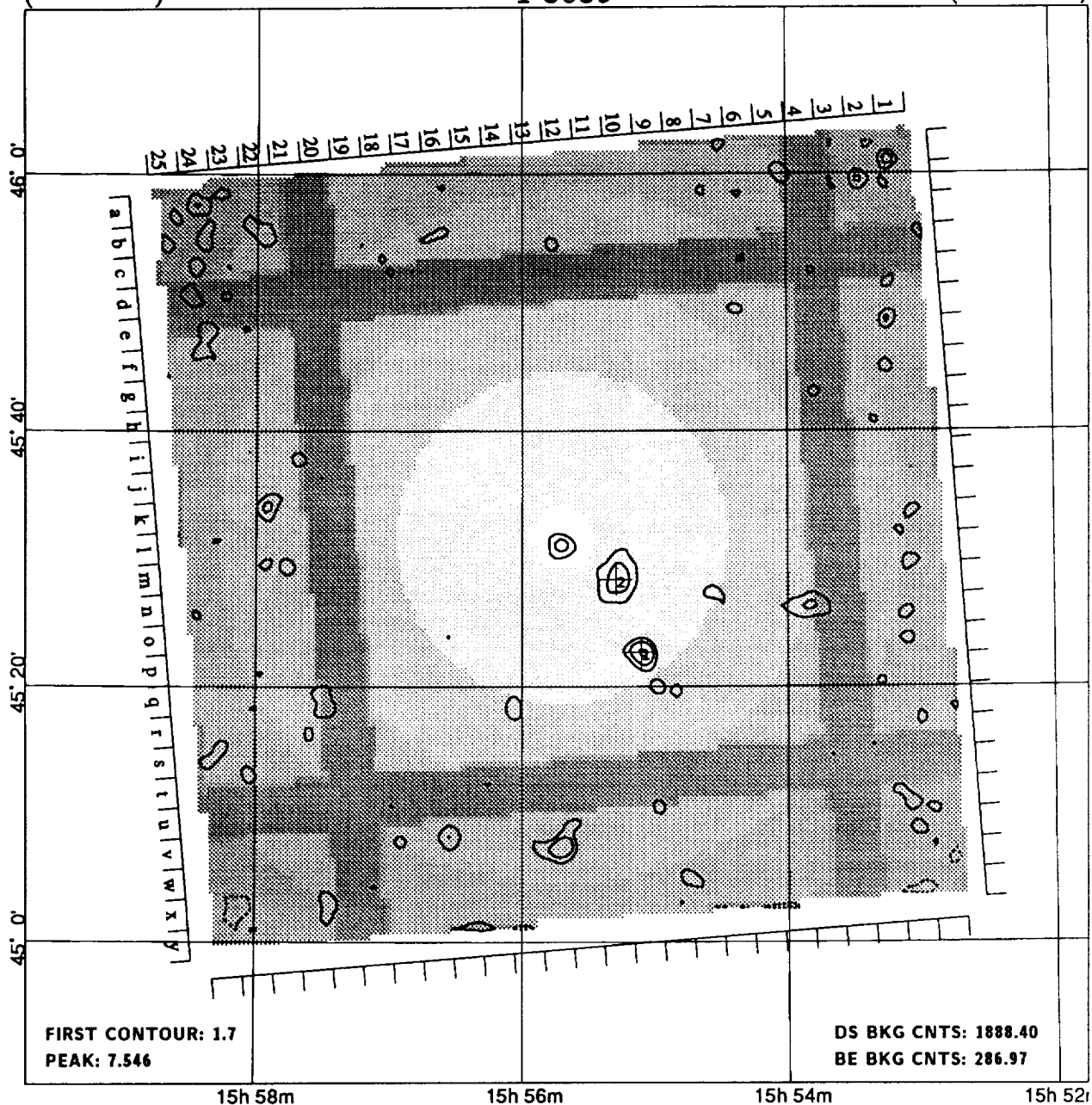
NH:  $7.0E+20$   
 REF/ID:  
 FIELD FLAGS:



(15h 55m)

I 3039

(15h 55m)



## 4C45.30: HIGH REDSHIFT CLUSTERS OF GALAXIES

FIELD CENTER: 15<sup>h</sup>55<sup>m</sup>44.0<sup>s</sup> 45°30'59" (B1950)15<sup>h</sup>57<sup>m</sup>19.5<sup>s</sup> 45°22'25" (J2000) $l$ : 71.96  $b$ : 49.03

DATE: 1979/237 - 1979/237

LIVETIME: 1530.2s

ROLL ANGLE: 85.5°

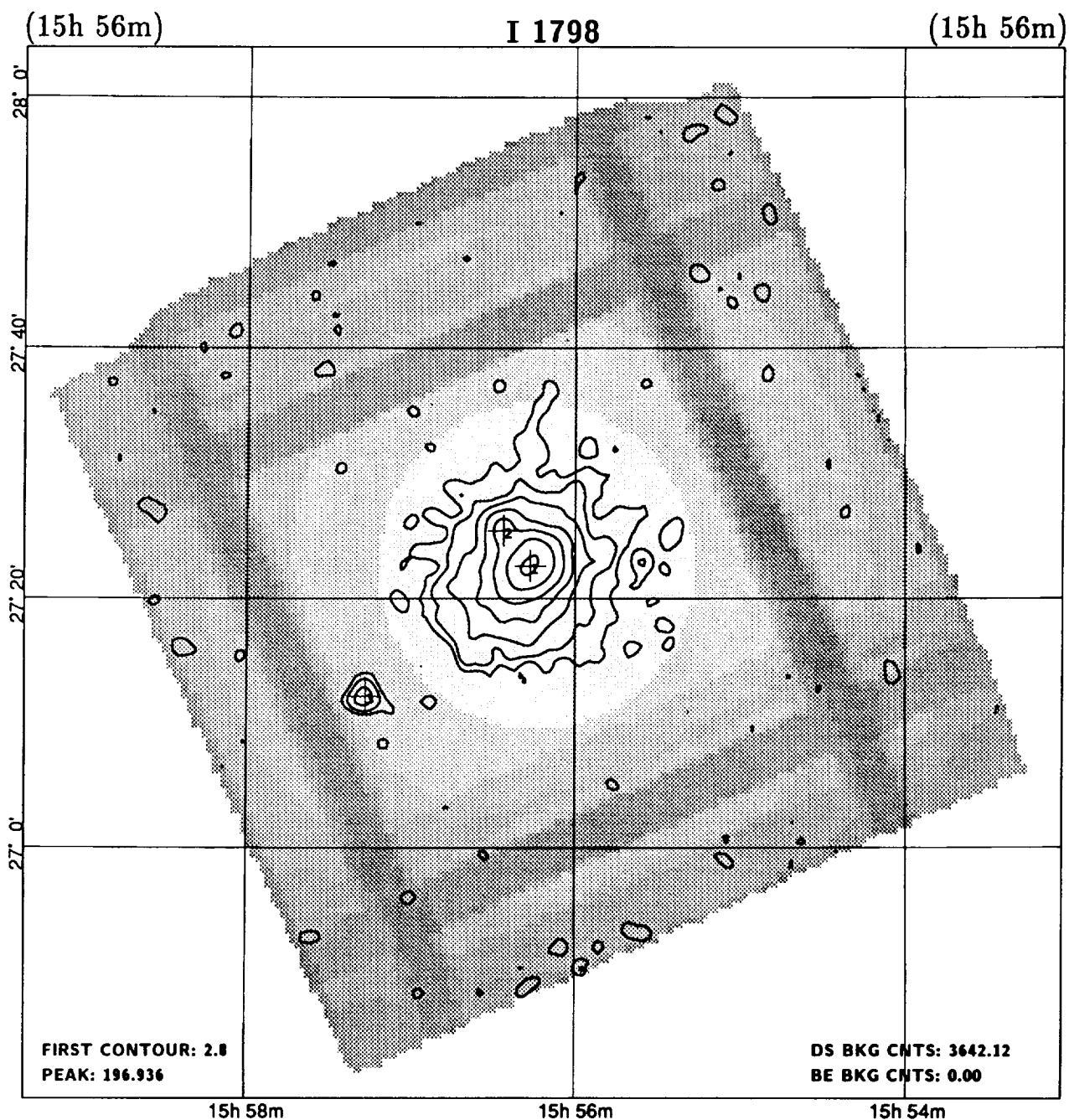
NH: 1.4E+20

REF/ID:

FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3537	1	15 55 06.1	45 22 39	42	0.0215	0.0052	21.5	5.5	4.1	0.7	0	10.6	H	
3538	2	15 55 17.4	45 28 27	39	0.0175	0.0046	19.1	5.9	3.8	1.2	0	4.8	H	





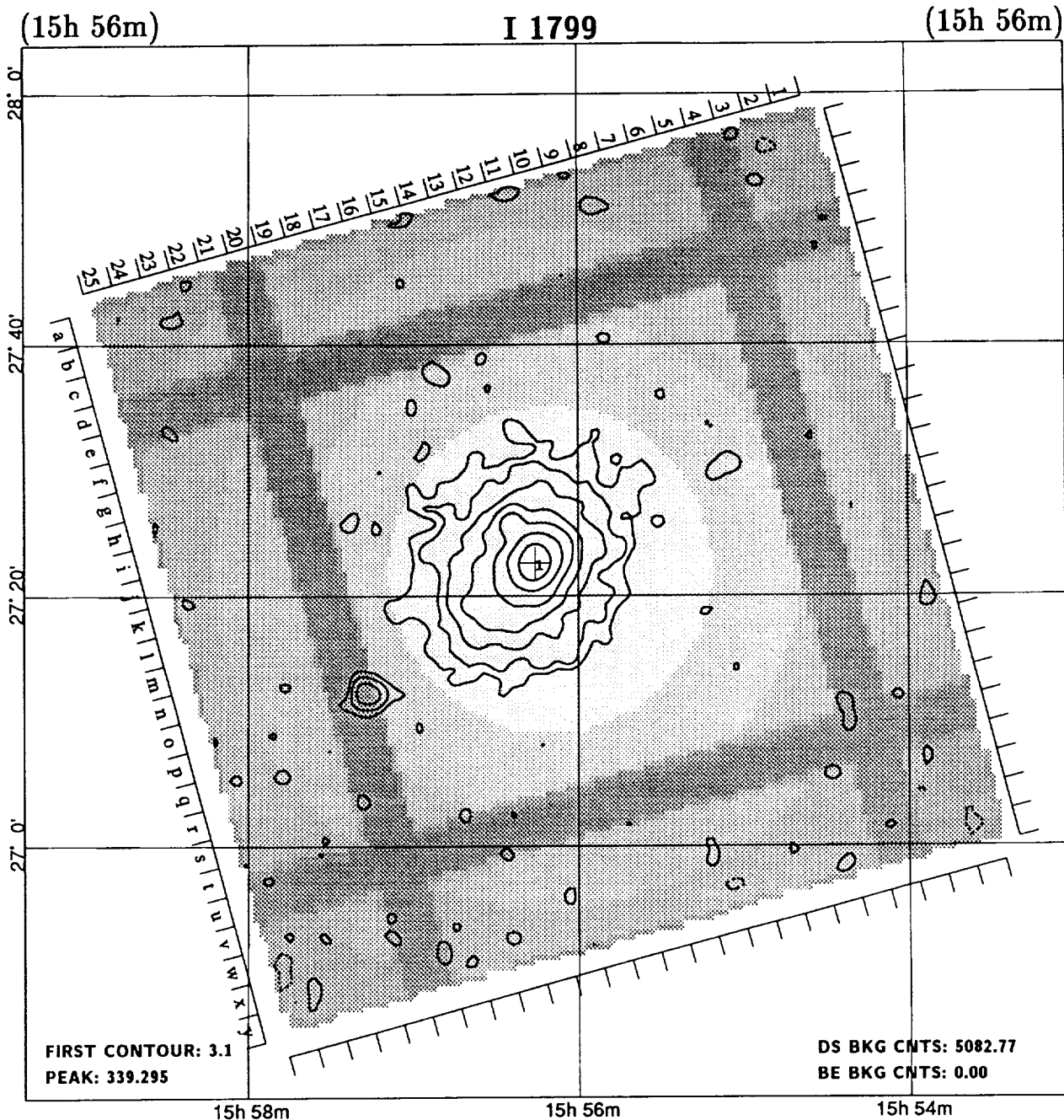
**A2142: STUDY, CLUSTERS OF GALAXIES**

FIELD CENTER:  $15^{\text{h}}56^{\text{m}}12.0^{\text{s}}$   $27^{\circ}21'59''$  (B1950)  
 $15^{\text{h}}58^{\text{m}}16.1^{\text{s}}$   $27^{\circ}13'28''$  (J2000)  
 $l: 44.21$   $b: 48.70$

DATE: 1979/ 29 - 1979/ 29  
 LIVETIME: 2951.3s

NH:  $3.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: CL

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	$R'$	SRC FLG	ID
3541	1L	15 56 16.4	27 22 37	31	0.277	0.018	608.5	493.5	14.9	3.9	0	1.3	A	CLG
3542	2L	15 56 26.2	27 25 25	31	0.047	0.010	102.0	191.0	4.6	13.6	0	4.8		*
3546	3L	15 57 16.6	27 12 10	50	0.0255	0.0051	41.9	10.1	4.9	1.0	100	17.5		AGN



**A2142: STUDY, CLUSTERS OF GALAXIES**

FIELD CENTER:  $15^{\text{h}}56^{\text{m}}12.0^{\text{s}}$   $27^{\circ}21'59''$  (B1950)  
 $15^{\text{h}}56^{\text{m}}16.1^{\text{s}}$   $27^{\circ}13'28''$  (J2000)  
 $\ell$ : 44.21  $b$ : 48.70

DATE: 1979/227 - 1979/227  
 LIVETIME: 4118.7s  
 ROLL ANGLE: 75.0°

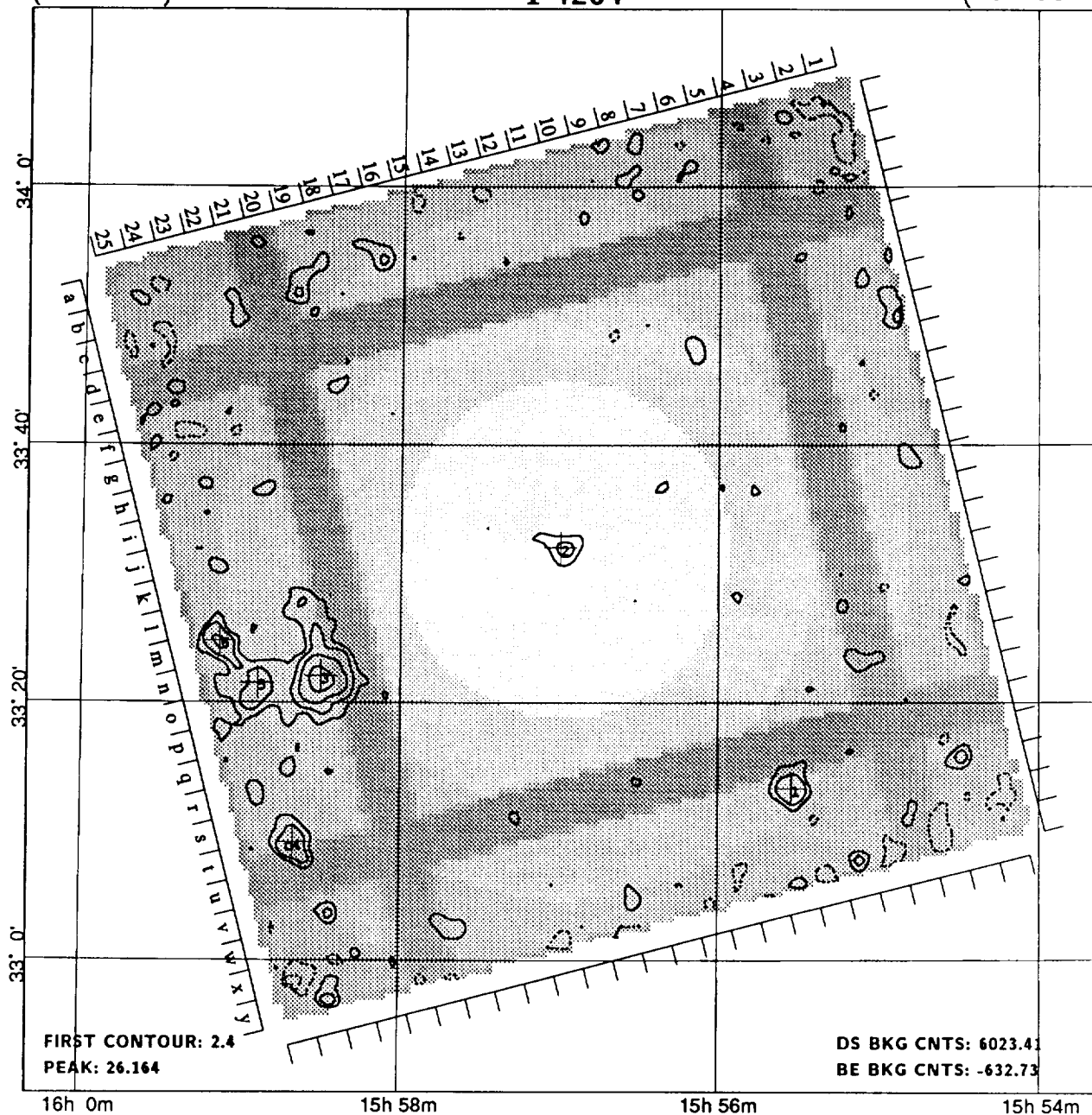
NH:  $3.9\text{E}+20$   
 REF/ID:  
 FIELD FLAGS: CLS

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3541	1L	15 56 15.8	27 22 38	31	0.324	0.016	988.5	679.5	19.9	3.7	0	1.1	A	CLG

(15h 56m)

I 4264

(15h 56m)



FIELD CENTER:  $15^h 56^m 59.4^s$   $33^\circ 31' 46''$  (B1950)  
 $15^h 58^m 55.1^s$   $33^\circ 23' 18''$  (J2000)  
 $l: 53.57$   $b: 49.37$

DATE: 1979/227 - 1979/227  
 LIVETIME: 4880.9s  
 ROLL ANGLE:  $75.7^\circ$

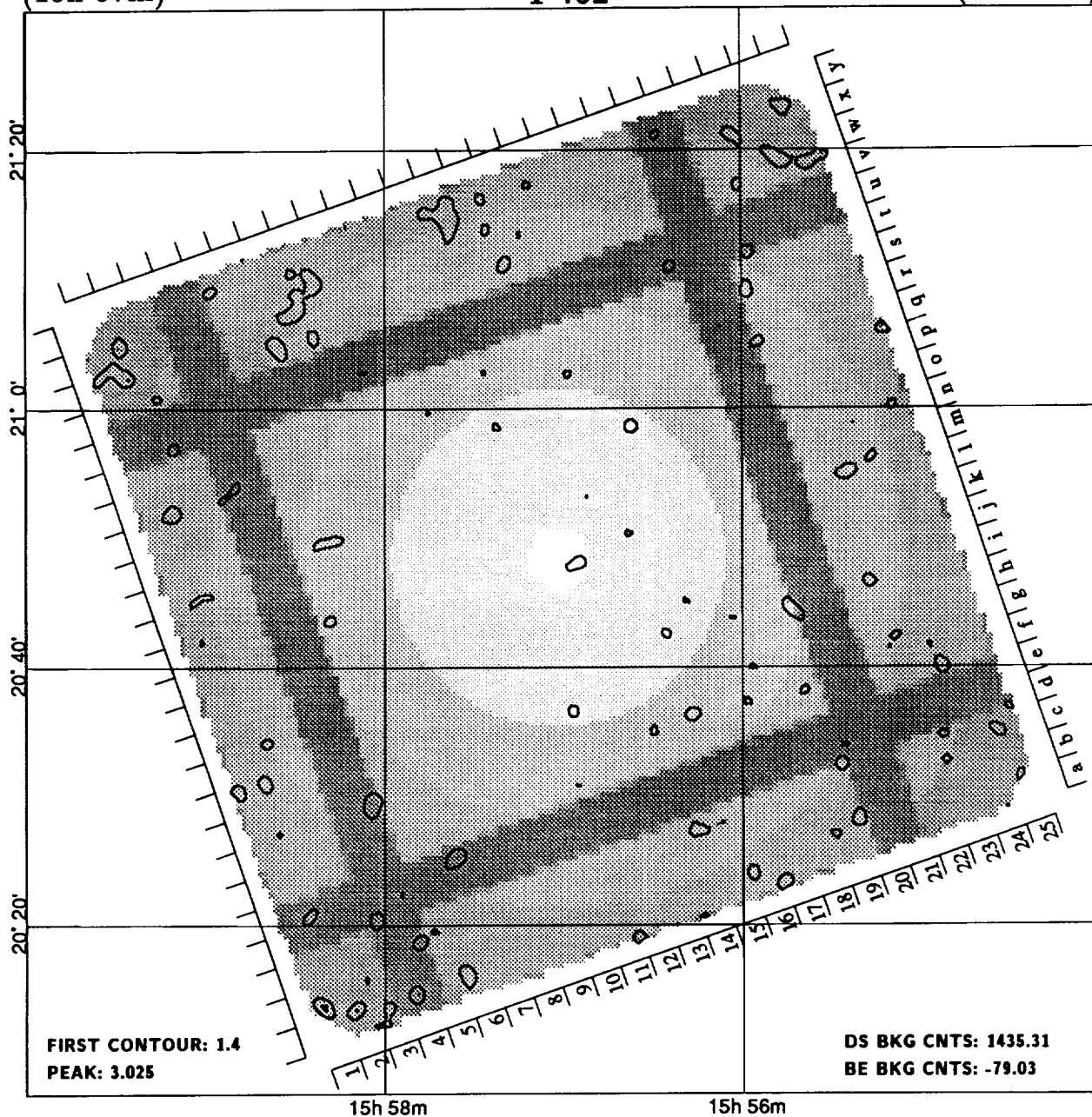
NH:  $2.3E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3539	1	15 55 32.4	33 13 20	53	*0.0118	0.0027	24.1	6.9	4.3	1.0	603	25.8	H	Q
3544	2	15 56 59.7	33 32 03	37	0.0062	0.0016	22.4	13.6	3.7	0.8	0	0.4	H	Q
3551	3	15 58 30.0	33 22 03	50	*0.0333	0.0039	78.8	8.2	8.4	3.1	601	21.5	H	
3552	4	15 58 40.0	33 09 09	56	*0.0114	0.0031	18.5	6.5	3.7	1.0	805	31.1	H	
3553	5	15 58 53.7	33 21 30	56	0.0112	0.0028	22.3	8.7	4.0	9.7	0	26.2	H	
3556	6	15 59 08.0	33 24 47	53	0.0121	0.0030	22.7	8.3	4.1	8.8	200	27.6	A	S

(15h 57m)

I 462

(15h 57m)



## NGC 6027A-F ABNORMAL GALAXIES SURVEY

**FIELD CENTER:**  $15^{\text{h}}57^{\text{m}}00.0^{\text{s}}$   $20^{\circ}48'59''$  (B1950)  
 $15^{\text{h}}59^{\text{m}}11.9^{\text{s}}$   $20^{\circ}40'31''$  (J2000)  
 $l$ : 34.86  $b$ : 46.85

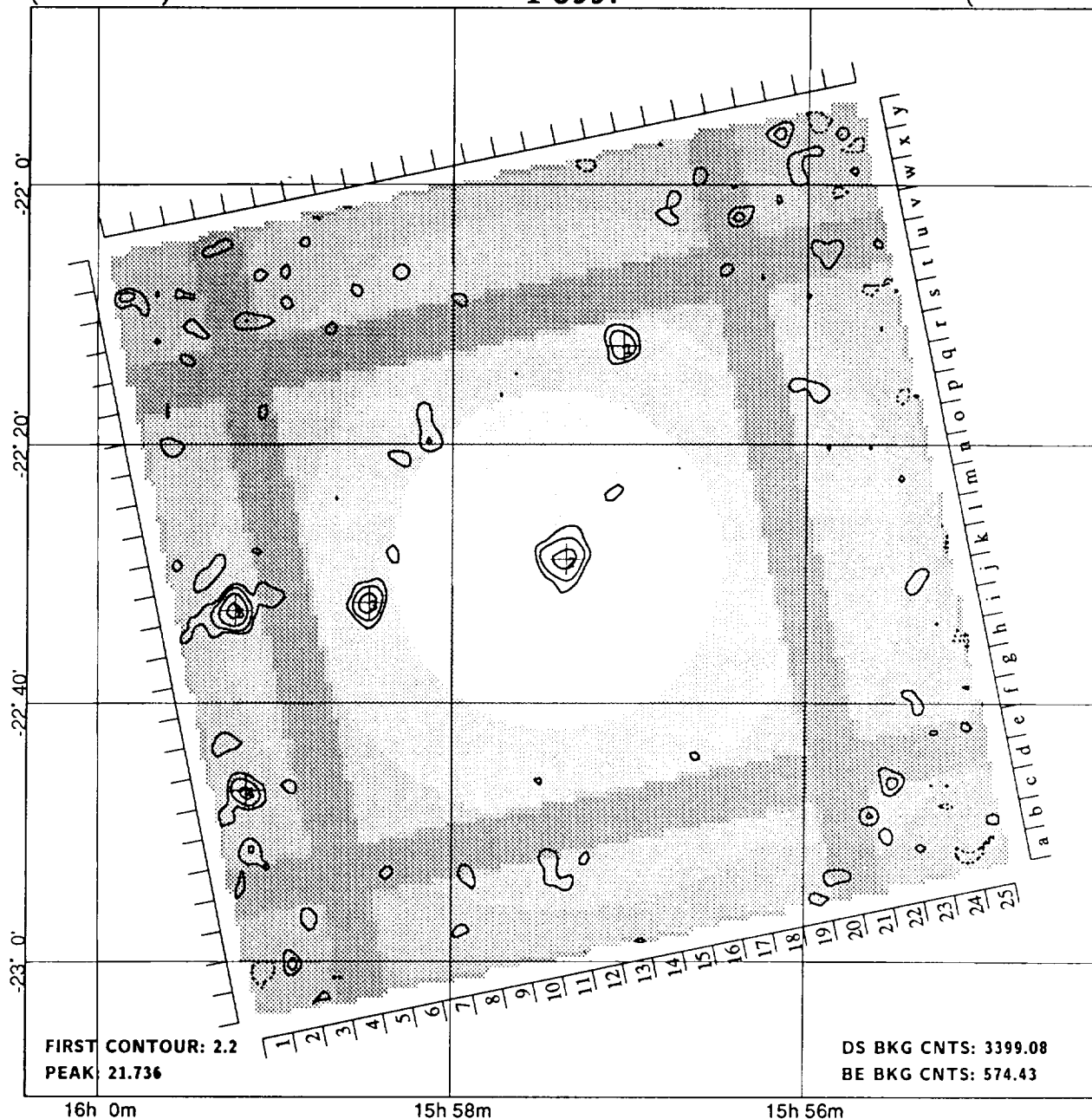
**DATE:** 1979/ 36 - 1979/ 36  
**LIVETIME:** 1163.1s  
**ROLL ANGLE:** -109.0°

**NH:**  $3.9\text{E}+20$   
**REF/ID:**  
**FIELD FLAGS:**

(15h 57m)

I 5997

(15h 57m)



Transition B Stars: DELTA SCO (B0.5 IV)

FIELD CENTER:  $15^h 57^m 22.0^s$   $-22^\circ 28' 29''$  (B1950)  
 $16^h 00^m 19.7^s$   $-22^\circ 36' 55''$  (J2000)  
 $l: 350.10$   $b: 22.50$

DATE: 1980/ 47 - 1980/ 47  
 LIVETIME: 2754.4s  
 ROLL ANGLE:  $-101.6^\circ$

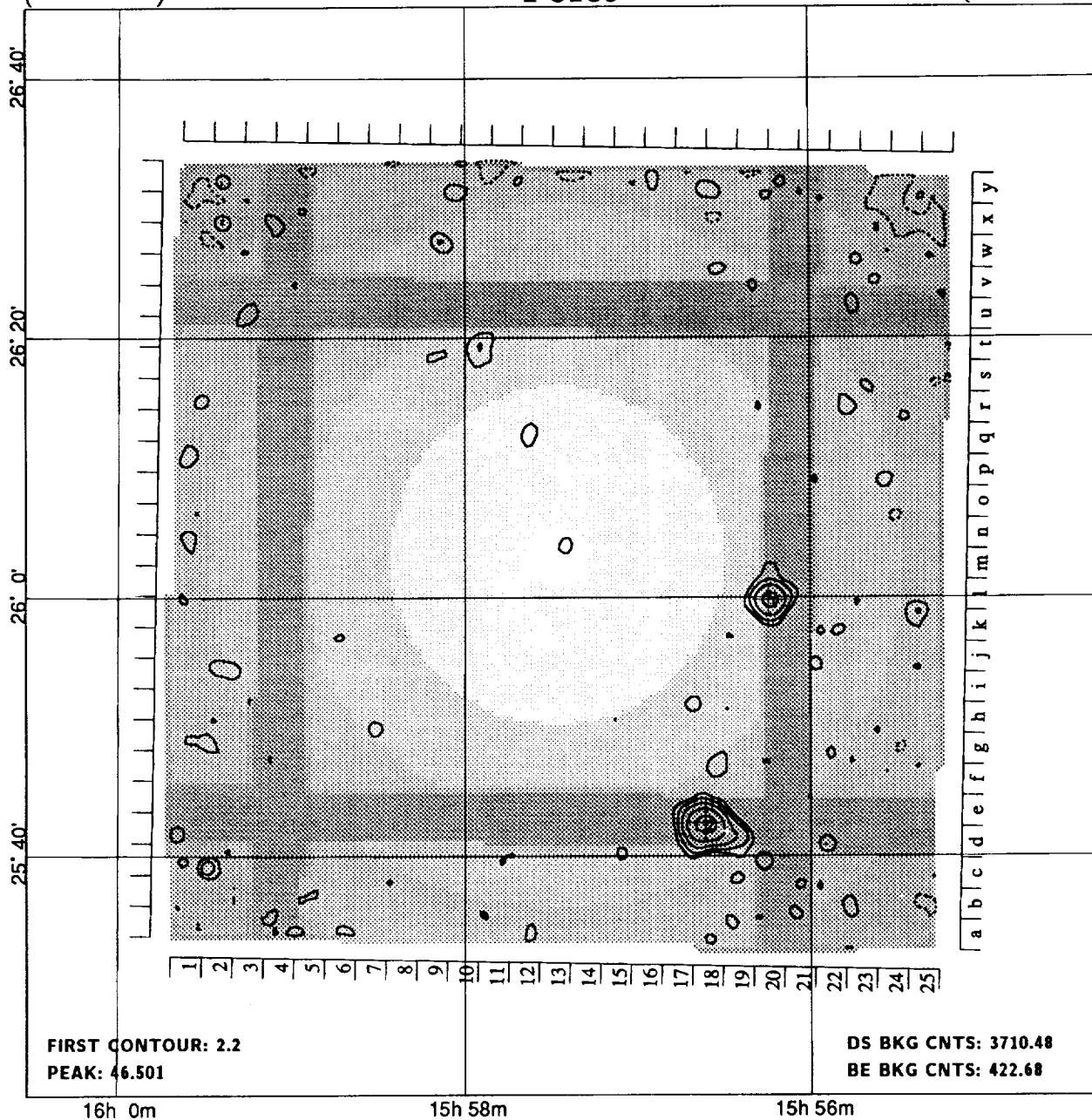
NH:  $1.1E+21$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3545	1	15 57 02.0	-22 12 29	51	0.0175	0.0038	26.8	7.2	4.6	0.8	100	16.7	H	
3547	2	15 57 21.2	-22 28 55	35	0.0246	0.0038	50.4	10.6	6.5	1.5	0	1.0	H	S
3550	3	15 58 28.2	-22 32 17	50	0.0241	0.0042	39.1	7.9	5.7	0.9	0	15.8	H	
3557	4	15 59 09.8	-22 46 44	55	0.0194	0.0052	18.6	6.4	3.7	0.9	0	30.7	H	
3558	5	15 59 13.3	-22 32 53	50	0.0389	0.0062	45.3	6.7	6.3	1.2	100	26.1	H	S

(15h 57m)

I 3189

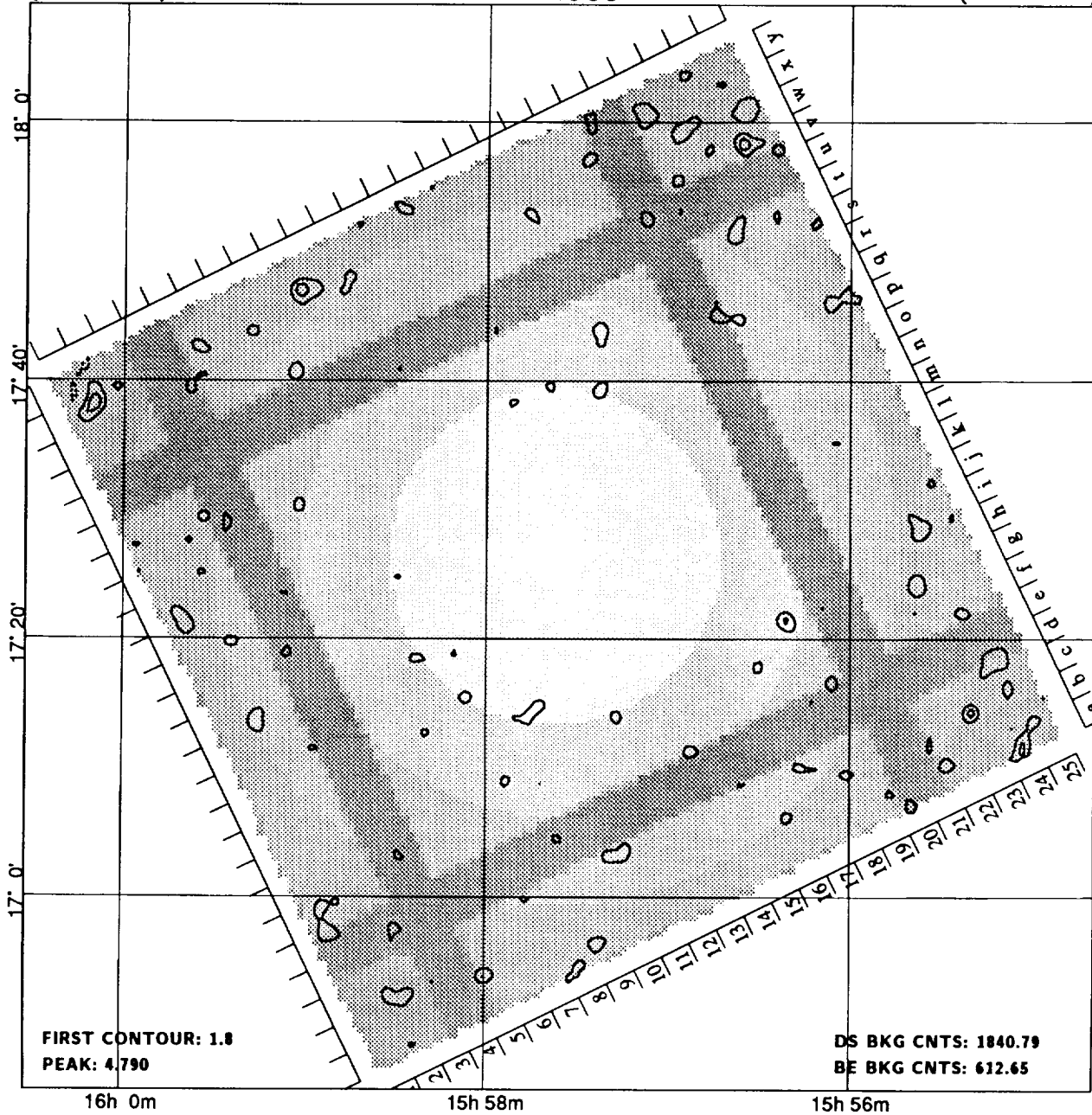
(15h 57m)



(15h 57m)

I 4988

(15h 57m)



FIELD CENTER:  $15^h 57^m 36.0^s$   $17^\circ 26' 59''$  (B1950)  
 $15^h 59^m 51.7^s$   $17^\circ 18' 34''$  (J2000)  
 $l: 30.35$   $b: 45.56$

DATE: 1980/ 24 - 1980/ 24  
 LIVETIME: 1491.7s  
 ROLL ANGLE:  $-116.1^\circ$

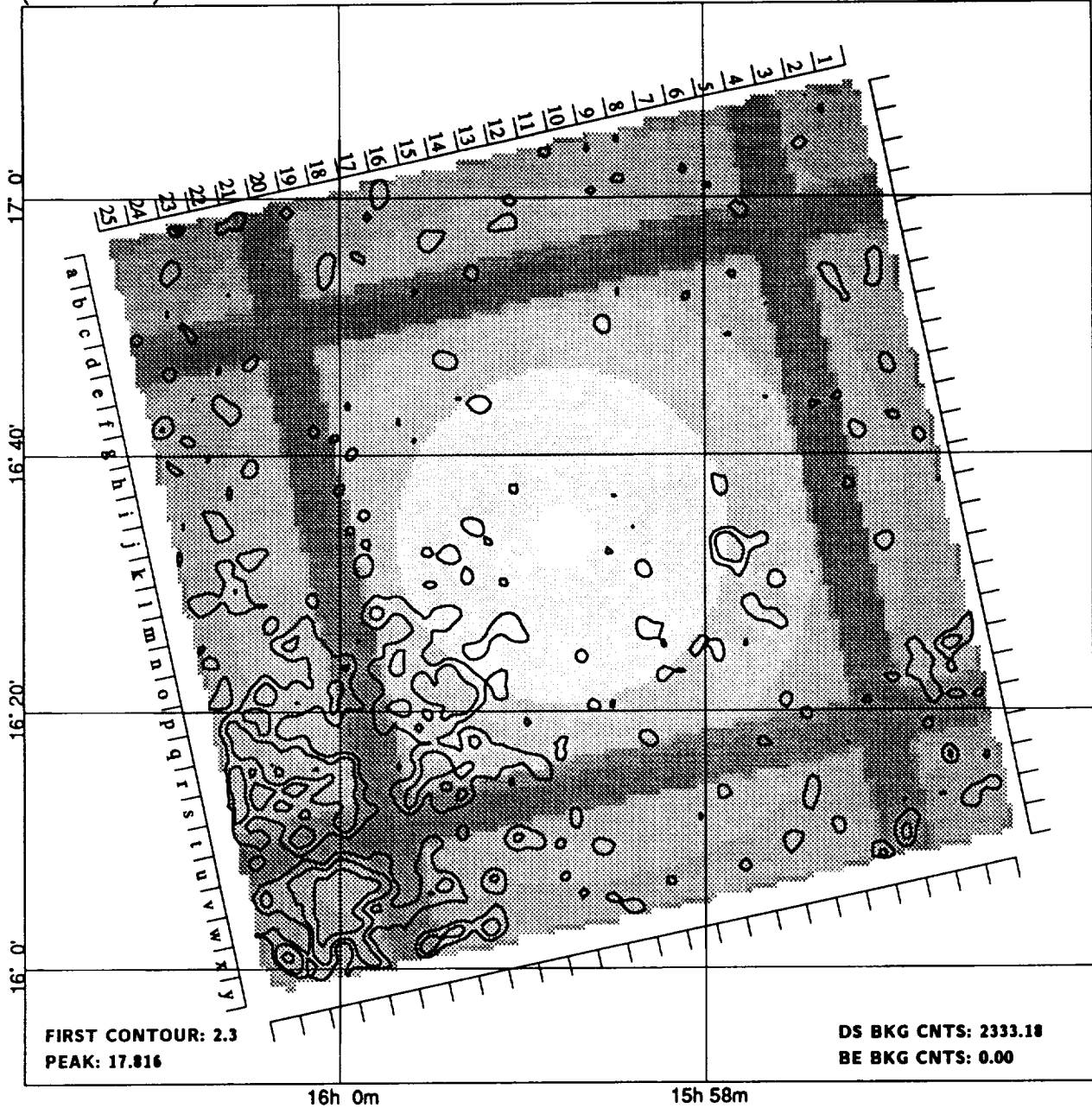
NH:  $3.3E+20$   
 REF/ID:  
 FIELD FLAGS:



(15h 58m)

I 4989

(15h 58m)

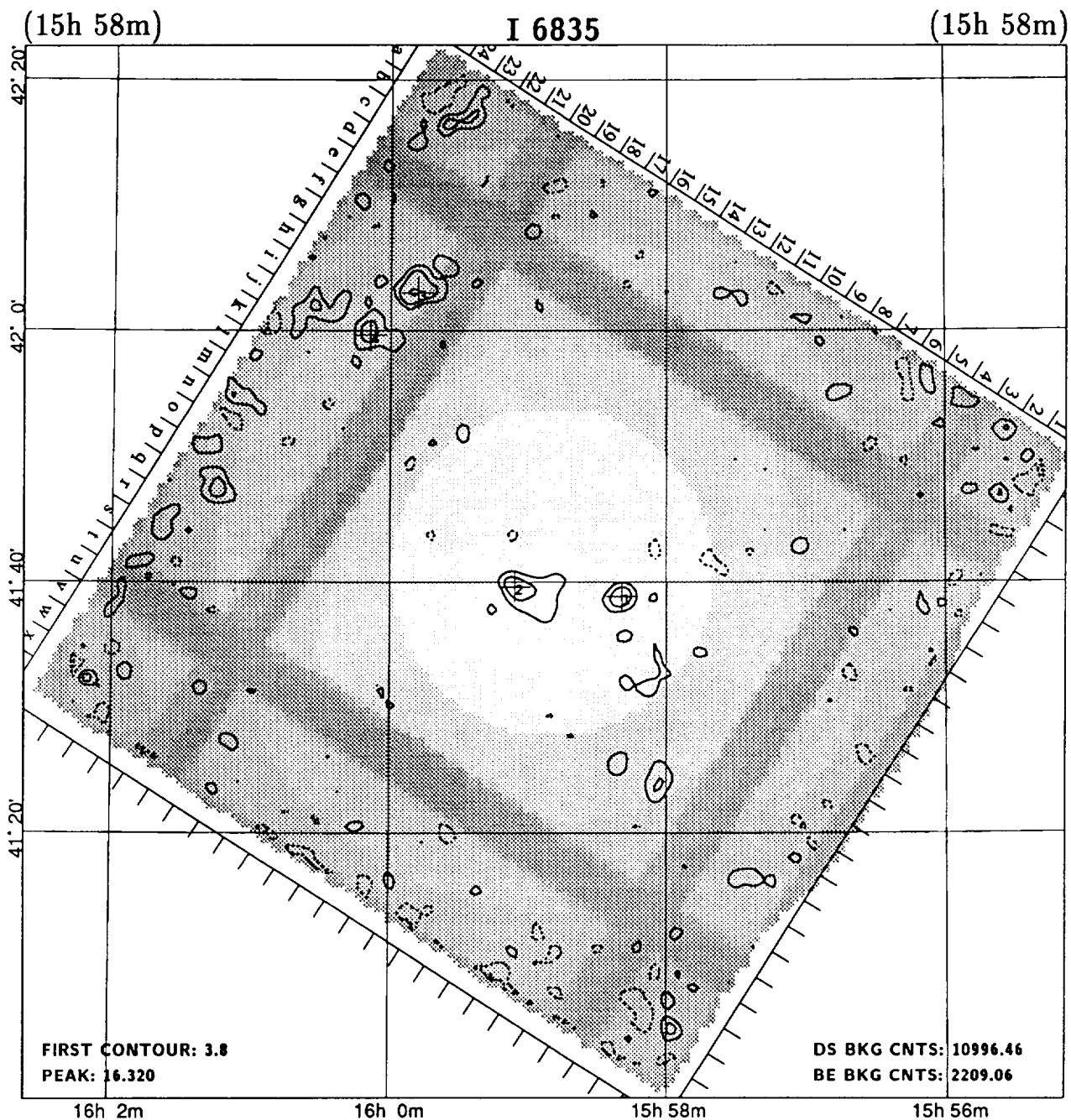


NPS BRIGHT SPOT #2

FIELD CENTER: 15<sup>h</sup>58<sup>m</sup>48.0<sup>s</sup> 16°32'59" (B1950)  
16<sup>h</sup>01<sup>m</sup>04.6<sup>s</sup> 16°24'38" (J2000)  
ℓ: 29.32 b: 44.96

DATE: 1980/233 - 1980/233  
LIVETIME: 1890.6s  
ROLL ANGLE: 77.9°

NH: 3.3E+20  
REF/ID:  
FIELD FLAGS: L



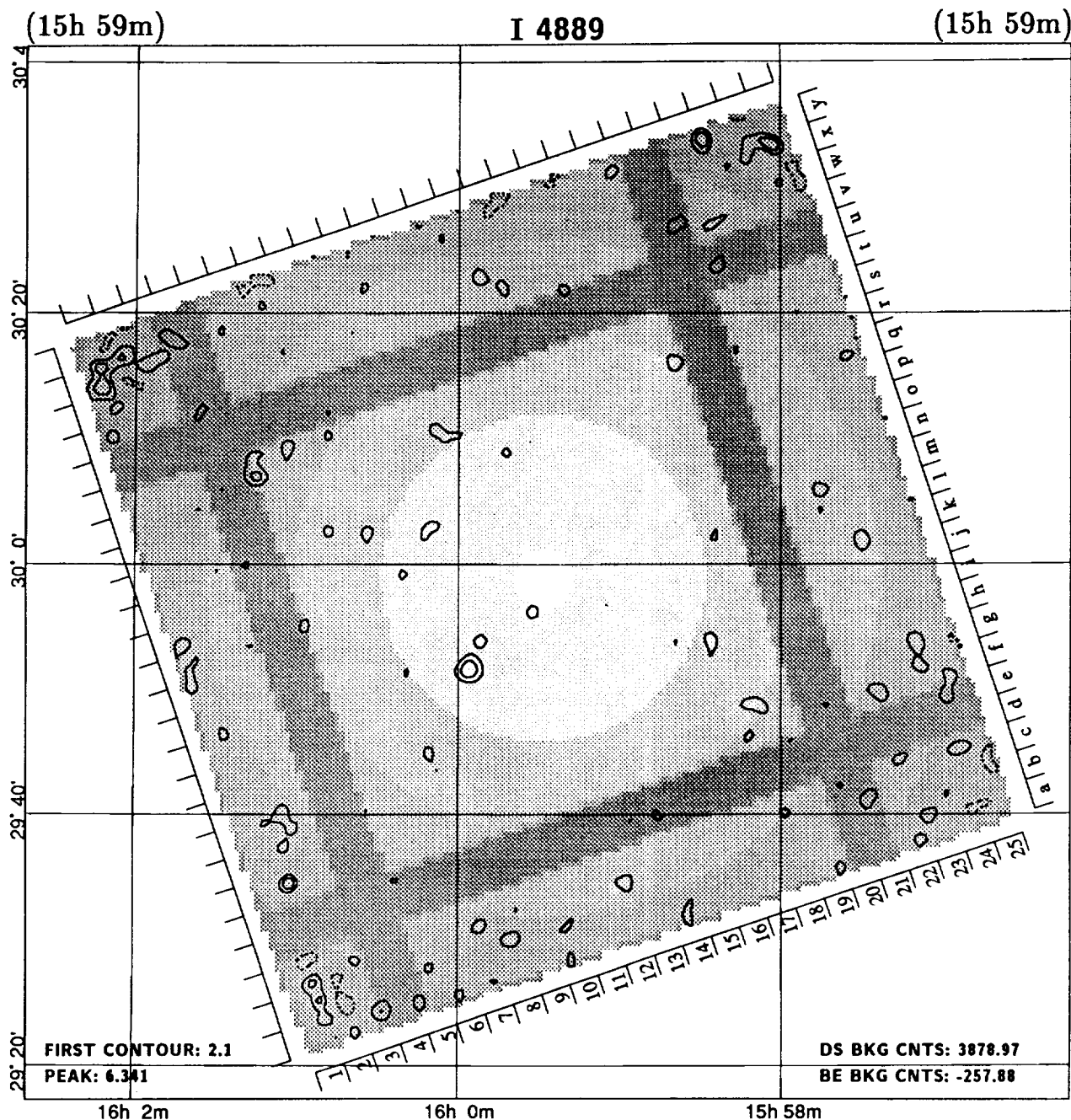
C1 1558+41, OBSERVATIONS OF VERY DISTANT CLUSTERS

FIELD CENTER:  $15^h 58^m 53.2^s$   $41^\circ 40' 49''$  (B1950)  
 $16^h 00^m 35.6^s$   $41^\circ 32' 27''$  (J2000)  
 $l: 66.04$   $b: 48.96$

DATE: 1980/277 - 1980/278  
 LIVETIME: 8910.7s  
 ROLL ANGLE:  $122.4^\circ$

NH:  $1.4E+20$   
 REF/ID:  
 FIELD FLAGS:

CAT #	FLD #	RA (1950)	DEC (1950)	$\pm$ "	COUNT RATE	$\pm$	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC FLG	ID
3549	1	15 58 19.1	41 38 51	41	0.0069	0.0014	43.5	35.5	4.9	0.7	0	6.3	H	
3555	2	15 59 05.7	41 39 37	35	0.0063	0.0013	41.2	33.8	4.8	1.7	0	2.8	H	
3563	3	15 59 48.2	42 03 01	53	*0.0103	0.0020	39.8	17.2	5.3	1.5	501	24.3	H	
3566	4	16 00 09.0	41 59 38	56	0.0072	0.0018	28.8	24.2	4.0	1.1	0	24.0	H	



STAR IOTA CRB (HD 143807), AP STARS

FIELD CENTER:  $15^h 59^m 26.4^s$   $29^\circ 59' 23''$  (B1950)  
 $16^h 01^m 26.8^s$   $29^\circ 51' 04''$  (J2000)  
 $l$ : 48.30  $b$ : 48.46

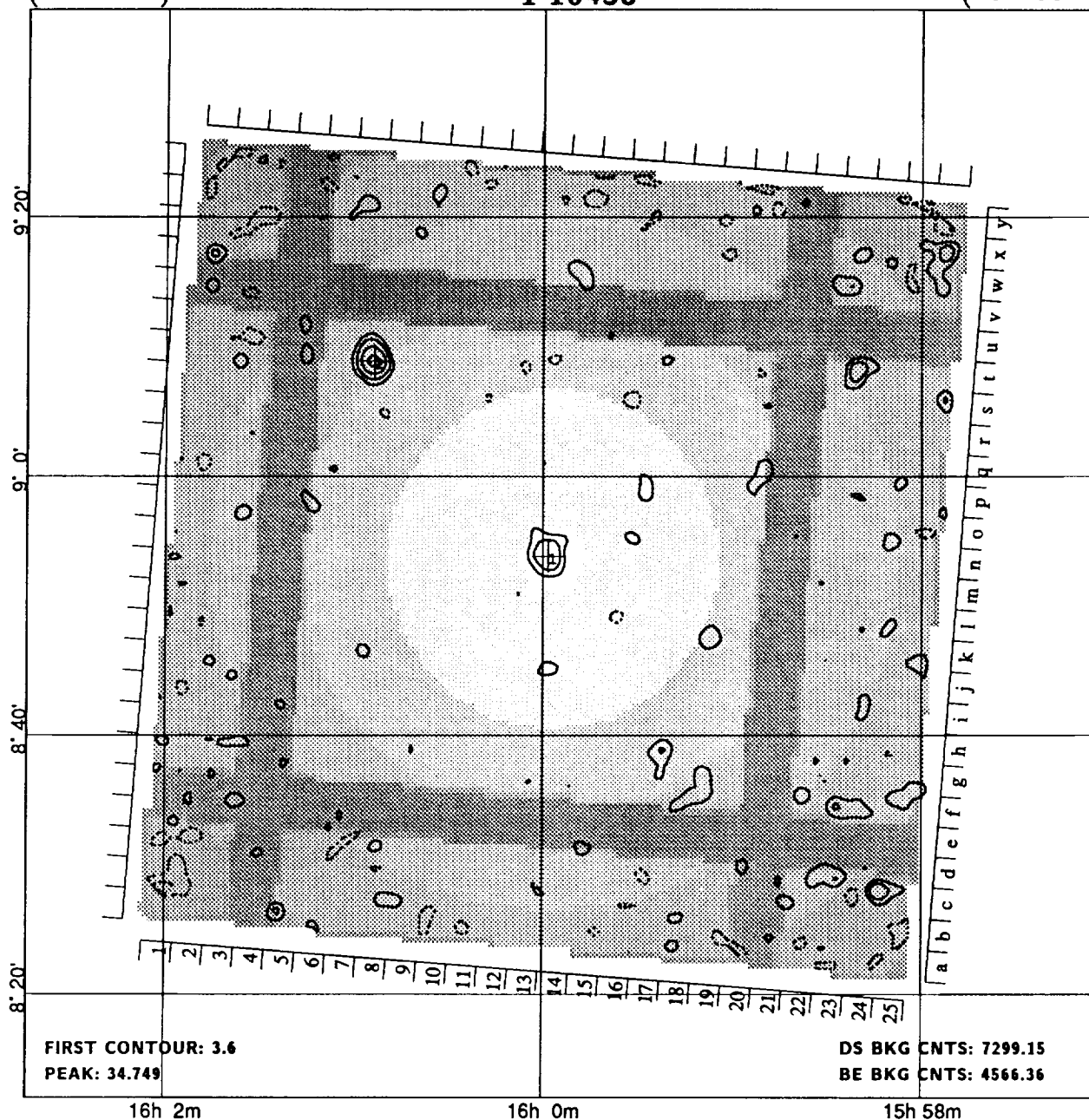
DATE: 1980/ 25 - 1980/ 25  
 LIVETIME: 3143.2s  
 ROLL ANGLE:  $-108.6^\circ$

NH:  $2.9E+20$   
 REF/ID:  
 FIELD FLAGS:

(15h 59m)

I 10438

(15h 59m)



**FIELD CENTER:** 15<sup>h</sup>59<sup>m</sup>54.0<sup>s</sup> 08°53'59" (B1950)  
16<sup>h</sup>02<sup>m</sup>18.7<sup>s</sup> 08°45'43" (J2000)  
*l*: 20.02 *b*: 41.39

**DATE:** 1981/ 72 - 1981/ 72  
**LIVETIME:** 5914.7s  
**ROLL ANGLE:** -85.6°

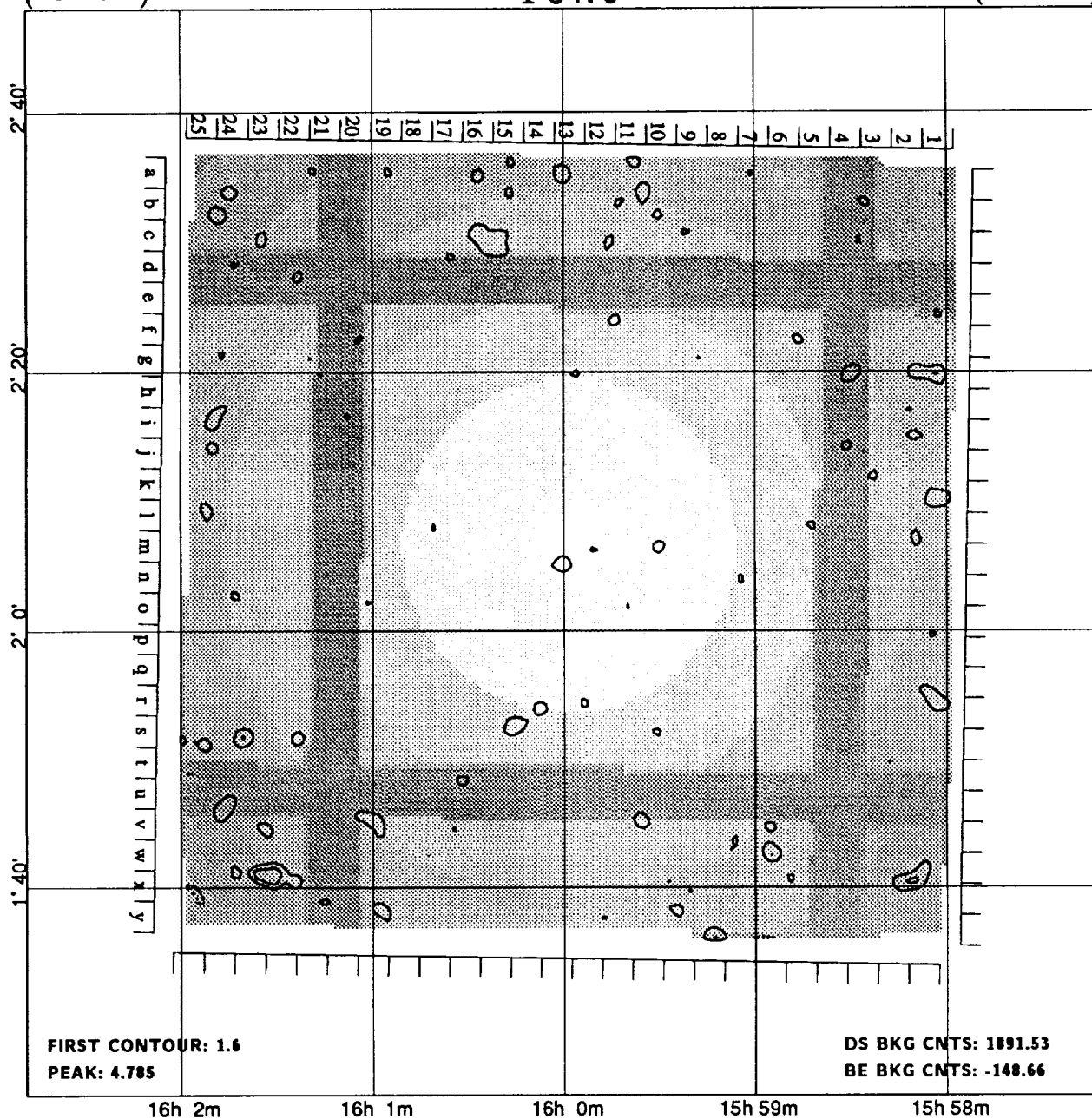
**NH:** 3.8E+20  
**REF/ID:**  
**FIELD FLAGS:** L

CAT #	FLD #	RA (1950)	DEC (1950)	± "	COUNT RATE	±	NET CTS	BKG CTS	S/N	SIZE COR	RECO	R'	SRC ID
3564	1L	15 59 58.3	08 53 50	35	0.0104	0.0026	46.0	41.0	3.9	1.0	0	1.1	
3569	2L	16 00 54.0	09 08 52	48	0.0259	0.0039	76.1	21.9	6.5	0.9	0	21.1	

(16h 0m)

I 3476

(16h 0m)



3C 327, BROAD AND NARROW-LINE RADIO GALAXIES

FIELD CENTER:  $16^{\text{h}}00^{\text{m}}00.0^{\text{s}}$   $02^{\circ}05'59''$  (B1950)  
 $16^{\text{h}}02^{\text{m}}31.7^{\text{s}}$   $01^{\circ}57'43''$  (J2000)  
 $l: 12.49$   $b: 37.84$

DATE: 1979/242 - 1979/242  
 LIVETIME: 1532.8s  
 ROLL ANGLE:  $91.0^{\circ}$

NH:  $6.3\text{E}+20$   
 REF/ID:  
 FIELD FLAGS:



REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>				
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13. ABSTRACT (Maximum 200 words) <p>The Einstein Observatory (HEAO-2, launched November 13, 1978) achieved radically improved sensitivity over previous x-ray missions through the use of focusing optics, which simultaneously afforded greatly reduced background and produced true images. During its 2.5-yr mission, the Einstein X-Ray Telescope was pointed toward some 5,000 celestial targets, most of which were detected, and discovered several thousand additional "serendipitous" sources in the observed fields. This catalog contains contour diagrams and source data, obtained with the imaging proportional counter in the 0.16 to 3.5 keV energy band, and describes methods for recovering upper limits for any sky position within the observed images.</p> <p>The main catalog consists of six volumes (numbered 2 through 7) of right ascension ordered pages, each containing data for one observation. Along with the primary documentation describing how the catalog was constructed, volume 1 contains a complete source list results for merged fields, a reference system to published papers and data useful for calculating upper limits and fluxes. A machine readable version of the catalog is available as a set of three CD-ROM (Compact Disk-Read Only Memory), and source information is also accessible via an on-line computer service.</p>				
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